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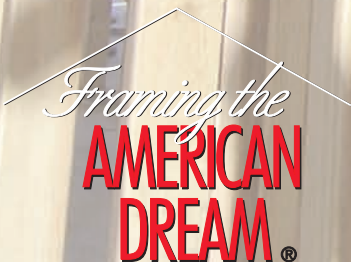
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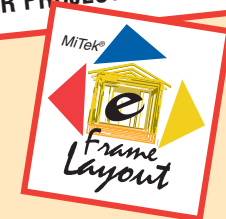
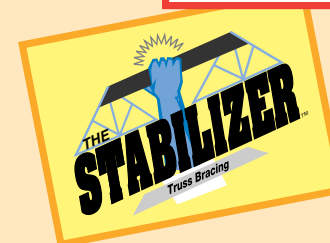
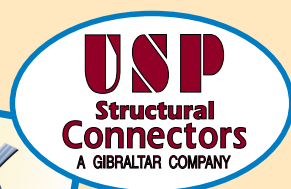
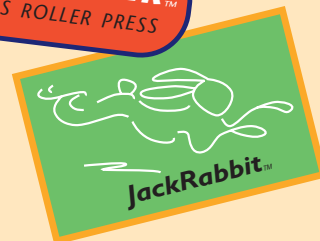
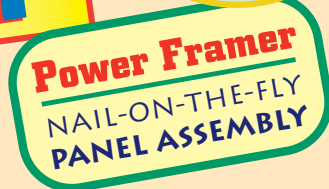
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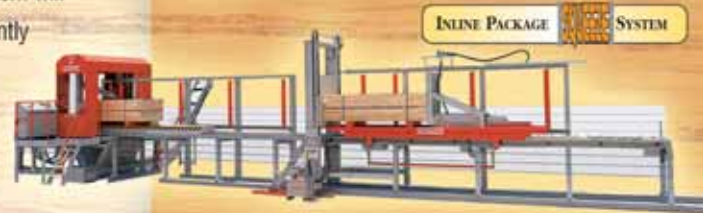
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Component Manufacturers Divided on Whole House Design

by Libby Walters

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2005 National Design Specification® (NDS®) for Wood Construction

by Phil Line, P.E.; John "Buddy" Showalter, P.E.; and Robert J. Taylor, Ph.D., PEng.

The 2005 Edition of the *National Design Specification for Wood Construction* is now approved. Discover the changes to the 2005 NDS here.

SBC

Industry News

See page 85 for details about exciting developments at www.sbcmag.info!

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by WTCA Staff

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by Libby Walters

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by Melinda Caldwell

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Editor's Message

Strategic Reactions to Competitive Forces

by Kendall Hoyd

"Of all human powers operating on the affairs of mankind, none is greater than that of competition."

—Henry Clay (1777 - 1852)
U.S. politician, lawyer. Speech, 1832.

This issue of **SBC** is built on the theme of design and engineering enhancements in our industry. As WTCA president, my typical marching orders are to come up with some material that is consistent with that theme. That won't really happen this time for two basic reasons. One, I am, for lack of more apt terminology, an accountant by background, and therefore don't know enough about engineering or design to even fake it. Two, I know that Libby is about to go on vacation, and by the time this reaches **SBC** staff for review, she won't be around to do anything about it.

Instead, I'm going to lay out a framework for evaluating our industry's position in the competitive landscape of the overall construction industry. In 1979 a Harvard professor named Michael Porter published an article entitled "How Competitive Forces Shape Strategy" (*Harvard Business Review*, March-April 1979). I have always found his ideas very useful in providing a way to think about the strategic problems that a business, or in our case, an industry, faces. Design and engineering intellectual property and knowledge are part of the definition of our competitive landscape, so I'm not ignoring our editorial focus completely.

Dr. Porter wrote that the strength of the competitive forces in an industry determines the profitability of an industry, and a company or industry's evaluation of these forces should shape strategy. Most of what follows is a summarization of his 1979 article.

"Every industry has an underlying structure, or a set of fundamental economic and technical characteristics, that gives rise to these competitive forces."

The basic classification of the forces that govern competition in an industry according to the Dr. Porter, (you could also call this a "threat matrix" if you were more dramatically inclined), is as follows:

1. Threat of new entrants
2. Bargaining power of suppliers
3. Bargaining power of customers
4. Threat of substitute products

Here is my view of how component manufacturers are situated with respect to these four forces.

Threat of New Entrants

If you have a stake in the success of a structural building component manufacturer, you probably live with a concern about the threat of a new competitor entering your market. Design software advancements and equipment automation have greatly reduced the need for certain knowledge or experience as the minimum price of entry to open a truss plant. Having strong skills in geometry and trigonometry used to be critical success factors. While they are certainly useful still, you don't need them to open a truss plant. Design software has taken over that function. Another major deterrent generally to new entrants within an industry is high

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at a glance

- ❑ Consider this framework for evaluating our industry's position in the competitive landscape of the construction industry.
- ❑ There are basic forces that govern industry competition: the threat of new entrants, bargaining power of suppliers and customers, and the threat of substitute products.
- ❑ Our industry brings value by providing a service/product bundle that lowers costs and raises quality.

Editor's Message

Continued from page 7

capital costs or initial investments to get started. As we all know, compared to other industries the initial investment to get started in our industry isn't a really high number.

Product differentiation, access to distribution channels and non-scale related cost disadvantages are other typical barriers to entry. Many plants in many markets probably have access to customers, or ability to execute certain types of work very well, or maybe even a unique access to lower cost lumber than anyone else, but truly I would guess that none of these barriers is particularly strong in a component manufacturer's case either. I've heard hundreds of anecdotes over the years about the truss plant down the road that is simply willing to work for less, and this "willingness" can usually overcome a lot.

As automation of manufacturing equipment progresses, the barrier of high capital investment is going up a little bit each year. As each of us goes through the process of automating more and more of our plant, the investment required to compete with existing truss plants goes up a little bit at a time, and that lowers the threat of new entrants. Conversely, our industry is like virtually all others in that the advance of software capability and information technology continually simplifies the technical part of our business—in our case, component design. This is good for existing plants in that it lowers the cost of training new staff, and of executing projects with ever-higher degrees of difficulty, but it also makes it easier for new entrants because much of the specialized knowledge that truss plant managers, owners and technicians used to have proprietary command of is now embedded in software that can be readily obtained and learned by new players.

The other major element governing the competitiveness of new entrants in an industry is called the "experience curve." Incumbent companies, by virtue of having conducted successful operations and transactions for a number of years enjoy the advantages of knowing things like when you are better off to stick-frame a part of a roof, what types of customers they serve best, or how to get new employees to stay longer or learn faster. Like many things in life, most of these lessons are learned the hard way, and in business that means added cost. Of all the barriers to entry that are present for component manufacturers, this one appears to be the most effective and prevalent.

The bottom line for a component manufacturer, with respect to threat of new entrants, is that we have a lot more to worry about in that respect than Intel or Motorola or even our lumber or plate suppliers. In entrepreneurial America, there are plenty of capitalists willing and able to take on the barriers to entry that exist for component manufacturers.

Bargaining Power of Customers & Suppliers

The threat of new entrants is present for component suppliers due to fairly low barriers to entry. Our suppliers and in large parts of the country, our customers, however, enjoy significant economies of scale and high capital requirements as barriers to entry in their respective industries. For most truss plants, it is probably pretty rare for accounts

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THE FUTURE OF FRAMING

Publisher

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The mission of *Structural Building Components Magazine (SBC)* is to increase the knowledge of and to promote the common interests of those engaged in manufacturing and distributing structural building components. Further, *SBC* strives to ensure growth, continuity and increased professionalism in our industry, and to be the information conduit by staying abreast of leading-edge issues. *SBC's* editorial focus is geared toward the entire structural building component industry, which includes the membership of the Wood Truss Council of America (WTCA), the Steel Truss and Component Association (STCA) and the Structural Component Distributors Association (SCDA). These associations make up an industry strategic planning committee called the Structural Building Components Council (SBCC). The opinions expressed in *SBC* are those of the authors and those quoted, and are not necessarily the opinions of the associations listed above.

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AutoMill SC

Editor's Message

Continued from page 8

payable to pay a lumber invoice issued by a company smaller than they are. The same goes for truss plate invoices, for that matter. Similarly, large publicly traded companies construct a large and increasing portion of the housing built in the United States, so for many manufacturers, the scale of their customers is far greater than their own.

The relative scale of the suppliers and customers determines the concentration of bargaining power. As a rule, component manufacturers are price takers and don't have much effect on the price of 2x4s, no matter how much they shop or negotiate. If any component manufacturer were in a position to buy, say 50 percent of a mill's production on a regular basis, that manufacturer might have different conversations indeed when it comes to the price of lumber. This is because the purchasers (component manufacturers) are fragmented and small in comparison to lumber producers, and the negotiating power is concentrated in favor of the sellers. Any single manufacturer doesn't have much influence because the transactions that manufacturer represents aren't very important in the overall fortunes of the lumber mills.

Similarly, when a component manufacturer deals with a national builder that will buy 25 or 30 percent of total production if the manufacturer agrees to their price, the tables have turned, and now the seller is disadvantaged in negotiations with respect to the buyer because of the exact same phenomenon in reverse. The buyer is large and has concentrated bargaining power with respect to the seller. The buyer's decision about where to buy can have a very material effect on the fortunes of the seller.

So far after evaluating the first three factors of Dr. Porter's analysis, we find that we are faced with fairly low barriers to entry, (and therefore a reasonable threat of new competitors), and most component manufacturers are very small in scale with respect to both suppliers and customers (creating transactional and bargaining disadvantages). Sounds great, huh?

Threat of Substitutes

Finally, some good news. As truss manufacturers, we enjoy protection in this area because the choice of substitutes for trusses in most light framing applications is very limited. It is another illustration of the extent of regionalization and fragmentation of our industry that there are still construction markets where stick-framed roofs compete directly with components and maintain a healthy market share, but for the most part, in most of the country, there is not much threat of some other framing product or technology displacing metal plate connected wood trusses as the predominant product. We really tend to worry only about competing with each other and not with the suppliers of extruded plastic trusses or cast-in-place concrete residential roof systems.

Industry Profitability

So how do we maintain a healthy, profitable industry in the face of these forces which mostly seem to be arranged against us? We do it by being the ones able to find the value propositions that meet the customers' demands in our respective markets. What is our value proposition? We don't own the software; most of us don't have any proprietary equipment designs or patented technologies or products, so how do we bring value to the customers? We bring value by being the ones able to assemble the software, the equipment, the flow of design information, and knowledge of the customers' requirements into a service/product bundle that gets buildings and homes built for less money and higher quality than they otherwise would.

In biological terms, we are the red blood cells. The lungs are big and important, and the muscles are big and important, physiologically. But if the red blood cells didn't interact with the air brought in by the lungs, pick out the oxygen, and transport it in just the perfect way to the muscles, muscles and lungs would be useless to the organism. We are located in the value chain of a construction project precisely where the rubber hits the road, and we continue to thrive, despite all the competitive forces, because we transform a wide variety of inputs into something that makes buildings better. **SBC**

Critical Issues Affecting the Industry

The Structural building components industry faces a multitude of challenges every day. We want to know which issues are most important to you as a component manufacturer. Visit the web site below to register your vote for the top issues facing the industry. Five lucky survey participants will win a stainless steel **SBC Magazine** travel mug!

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Publisher's Message

Design Advancements Are Largely Market-Driven

by SBC Staff

"Yesterday I was a dog. Today I'm a dog. Tomorrow I'll probably still be a dog. Sigh! There's so little hope for advancement."

—Charles M. Schulz, (Snoopy)
U.S. cartoonist (1922 - 2000)



Those of you who have been in the building components industry for more years than you have toes don't need a reminder that times have changed. Much of what is different today lies within the realm of component design and engineering, which brings us to this issue's theme: **Design & Engineering Advancements.**

Just think of the dozens of new design software versions and upgrades you've installed. You've weathered the storm of multiple building code changes. The demands of the local market have changed slightly or drastically, and you've risen to the challenge. In the last few years, "whole house design" and "turnkey" have made their way into your daily vocabulary. Truss and component design ability has migrated from "we don't have the capability to design that" to "if you can dream it, we can design and build it." In short, these changes impacting truss and component design are largely market-driven. They are the result of demands from the builder and end user for building components that are safer as well as more complex, economical and efficient.

As usual, we've tried to bring you a wide range of content in this issue. It's no surprise that among the hottest topics in the industry is whole building/house design. And it's a topic that's bound to get ever hotter. Find component manufacturer perspectives that run the gamut in "Component Manufacturers Divided on Whole Building Design" on page 44.

In "Surviving Idaho" (page 56) we spotlight WTCA President Kendall Hoyd's Idaho Truss. It seems that no matter where you go, there's no escaping the challenges of running a successful truss plant. Find out why often the greatest reward means persevering through the rough spots.

Part 3 of "The Road to Reentry" (page 60) wraps up the series, as we walk into the life of prison inmates participating in Stark Truss's technician training program at Marion (Ohio) Correctional Facility. We hope you'll be inspired by this group's enthusiasm and hunger for learning a new skill that has promise to carry them through their eventual re-integration into society. And from Stark's perspective, training inmates from the ground up and giving them an opportunity for employment (post-release) helps remedy the industry's truss technician shortage. To Damon, Pete, Rick, Squire and Tim: we wish you all the best.

Have you ever gotten the "chunk-out" error in your design software in the case of a truss that does not run for long spans and wondered what the heck it means? As it turns out, WTCA staff have heard from many of you on the same question, so we've decided to cover it in this issue's **Technical Q&A** column.

Finally, don't forget to check out "The TTT Level I Experience: New & Improved" for some of the new features available in the second version of Truss Technician Training Level I Online. Subtle changes in content and a sleek new interface takes the Level I user to new heights in e-learning.

There really is something for everyone in this issue. Get your design on! **SBC**



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Technical Q & A

Chunk-Out Design Errors

by Rachel Smith

If you're in the process of switching to ANSI/TPI 1-2002, "chunk-out" errors may be a new wrinkle in your floor truss designs. Read more about how to handle these errors.

We receive questions on new provisions of the ANSI/TPI 1-2002 National Design Standard for Metal Plate Connected Wood Truss Construction as more and more truss manufacturers are switching from the ANSI/TPI 1-1995 version. The following question relates to a new provision in Section 8.9.2 that applies to trusses with plating on the narrow face of lumber like floor trusses.

Question

Could you explain what a "chunk-out" error means in our software when we have a truss that does not run for long spans?

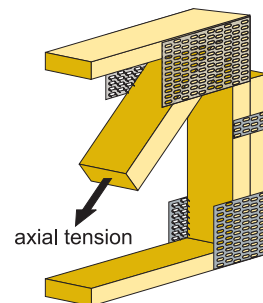
Answer

The chunk-out provision in design software is meant to address a potential design failure where high tension members can tear out the wood at the edge of the teeth along the grain of the wood. You can think about this as very similar to what happens when you split a piece of wood with an ax and it separates along the grain. (See photo.) Generally, changing lumber species or grade won't help; it's based on the size of the member underneath the truss plate and the amount of axial force.

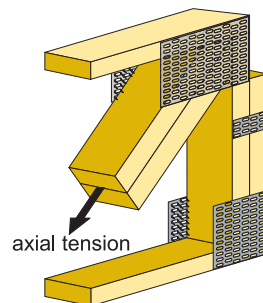
Stu Lewis, Research & Development Manager at Alpine Engineered Products explains, "This limitation was to account for interaction of stress concentrations due to the teeth on a truss plate only penetrating about 1/3-inch into the lumber and stress concentrations due to wood defects near the plate. This was found through experience to result in low tensile capacities of lumber even when the wood defect was not under the plate, so it is not something that can be readily solved by increasing plate length."

Section 8.9.2 of TPI 1-2002 states:

For wood thickness greater than 2 inches with plates embedded only on the surface normal to the thickness, the tension, T , introduced by a single joint into a wood member, shall not exceed 1600 pounds per inch of wood width, where wood thickness is the wood cross-section dimension perpendicular to the plane of the truss and wood width is the wood cross-section dimension in the plane of the truss, and this tension limit shall be adjusted per Section 6.4.



Single webs or chords:
max. axial tension = 2400 lb



Double webs or chords:
max. axial tension = 4800 lb

The TPI 1-2002 commentary further states:

The 1600 lb/in limit specified in Section 8.9.2 was added to the 2002 edition of the Standard to check against a wood "chunk-out" failure at tension joints, which testing has shown to be a failure mode that can occur, particularly with narrow-face plating. Test data from applications with plates on the narrow faces of 2x4 lumber has shown that the relatively high stress concentrations in the outermost portion of the narrow lumber faces where the teeth penetrate can result in premature wood fracture when a knot or other grain deviation occurs near the plate. Based on this empirical limit, the maximum normal duration tension load is 2400 lb for a 4x2 or 3x2, and 4800 lb for two 4x2s or two 3x2s.

As far as what you can do about it, Gary Obudzinski, a senior engineer at Truswal Systems Corporation says, "Chunk-out is based on the member force, and if the member force (web or chord) is slightly over the allowable load of 2,400 lbs for a 4x2 web member, for example, we will try to move a panel point and lower the force to be less than 2,400 lbs. If this does not work, our suggestion is to increase the member stack (i.e., add another web or two) until it works. For example, two 2x4s are good for 4,800 lbs. If a chord has chunk-out failure, we suggest doubling the chord in that panel."

Scott Coffman, a Builder's First Source engineer, reports that he and his designers most often see the chunk-out error on longer cantilevers, typically 24" long, with a large point load at the end. His solution is to double the top chord in the cantilever with the stacked section extending into the back span twice the cantilever distance.

The chunk-out error message may be new for those switching to TPI 1-2002, but most design software was already making a similar check on webs and doubling those up when necessary. The difference now is that webs and chords are subject to the same check. **SBC**

To pose a question for this column, call the WTCA technical department at 608/274-4849 or email technicalqa@sbcmag.info. For more frequently-asked technical questions and answers, visit the Education & Technical section of the WTCA web site at www.woodtruss.com. More answers are only a click away!

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at a glance

- ❑ ANSI/TPI 1-2002 has several new provisions that you will need to get used to as you change over from the 1995 version.
- ❑ Some floor truss designs created with 1995 provisions may develop "chunk-out" errors when they are re-analyzed with ANSI/TPI 1-2002.
- ❑ Doubling the particular web or chord in that section will solve the problem.



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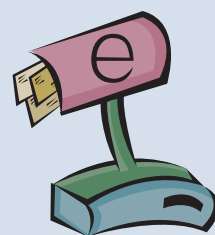
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Readers Respond:

This issue's theme—Design & Engineering Advancements—brings a variety of topics to light, inspiring *SBC* readers from component manufacturers to engineers to pass along their thoughts.

Design It Correctly in the First Place

Component manufacturer Bob Becht of Chambers Truss added a few comments on an article about truss design, pointing out that advances in design software allow for more efficient and economical truss design rules.

Dear Rachel,

I read your article "Rules of Good Truss Design" in the March issue of *SBC* with great interest. Most of what I read I agreed with but some of it was old-fashioned and might lead some to believe that not following these guidelines is "bad design."

I take issue with building a studio truss as a scissors truss with a non-structural filler. The scissors truss with filler is not structurally superior and adds a lot of useless lumber and plate. The scissors truss with filler has three bottom chords instead of two and a world of webbing. The studio truss you show has 12 pieces and 22 plates; the scissors truss with filler has 19 pieces and 56 plates! That's 58 percent more pieces! That just isn't good design. In a market that demands "value engineering," the scissors truss with filler is a non-starter. The argument that the scissors truss with filler is easier to repair doesn't bear much scrutiny. While it is easier to repair, the best solution is to design it correctly in the first place; we do it every day. All trusses are difficult to repair if they are built wrong.

Our customer service department doesn't report many problems with studio trusses. If the drop is inches off, the repair of the studio truss is as easy as the scissors truss with filler because in the studio, the bottom chord to the right of the peak and the drop web on the right side of the peak are dead wood and can be cut away. One of the reasons we used to build a scissors truss with filler (instead of a studio) was we did not have the capability to design the studio truss. Now we can design anything.

As the market becomes ever more competitive and the truss design software becomes more capable, many of the old practices die out. When I walk the shop I am amazed by

the designs we build and ship and the customer installs without problem.

Thanks for the article. I hope it stimulates discussion.

Bob Becht, Chambers Truss, Fort Pierce, FL

Architects & Structural Engineering

Industry veteran John Meeks submitted the following letter in response to a recent article published in STRUCTURE Magazine, surrounding the issue of building design and structural engineering. For full text of the article, "Should Architects be Allowed to Do Structural Engineering?," visit Support Docs at www.sbcmag.info.

Dear *SBC Magazine*:

I recently came across the attached article in *STRUCTURE Magazine* and thought you might find it of interest. This paper pretty well explains the long term state of affairs between Architects and Engineers here in Florida. Outside Dade and Broward counties almost anyone could design a residence, the concept being that residences are simple structures and there is therefore no need for expensive Architects and Structural Engineers. The unusual progression of present day residential design has evolved into the most complex of structural designs. Ask any SE if he or she would rather design a \$2,000,000 residence or a \$2,000,000 warehouse building. My guess is that most S.E.s would prefer the warehouse.

How does this affect WTCA? It falls right into my earlier predictions that the wood truss industry will eventually offer complete engineered structures. The homeowners may choose to use an Architect for the overall building design to meet his/her family living conditions, but the overall S.E. design will go to the nearest component manufacturer who offers complete design services.

I thought you might find this article of concern to the component industry.

Very truly yours,

John E. Meeks, PA., Ft. Lauderdale, FL *SBC*

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Safety Scene

Proper Lifting Techniques Prevent Back Pain

by Molly E. Butz

Be kind to your back and your
back will be kind to you!

According to the American Public Health Association (AHPA), back pain is the single most common and costly work-related injury. And, similar to many occupational injuries, the hidden costs of a back injury, such as scheduling delays and decreased production rates, increase the overall financial impact enormously.

Back pain and injuries can occur in varying degrees. The pain can range from dull and achy to pure agony, and doesn't necessarily indicate the severity of the injury. Sprains and strains to the muscles, tendons, ligaments and disks are a few of the main causes for back pain; however, the good news is that many of these back problems are preventable through the use of proper lifting techniques.

There are a wide variety of injuries that can occur in the back. Some injuries are serious enough to require surgery, some even lead to permanent disability. Any back injury can limit your activity level, both on and off the job. A component manufacturing facility can be a particularly precarious place to work, especially when discussing back care. Lifting or moving heavy lumber and boxes of metal plates, repetitive motions and many other daily activities can lead to pain or injury to the back.

...back injuries cost American industry 10 to 14 billion dollars in workers' compensation costs and about 100 million work days annually.

Remember that most back injuries can be attributed to one of these causes:

- Poor conditioning
- Lifting, bending or reaching with a bowed out back
- Twisting or jerking movements
- Repetitive motion
- Slouched sitting
- Loss of flexibility
- Lack of adequate rest
- Drug or alcohol abuse
- Obesity and/or poor nutrition
- Stressful work and/or living habits

Poor posture can contribute to back problems. As a preventative measure, it will help to become aware of your postures for sleeping, standing and sitting. Two favored sleeping positions include: sleeping on your side with your knees bent or sleeping on your back. For good chair posture, sit with your knees slightly higher than your hips with your hips located near the rear of the chair and when standing, stand with the shoulders back with the spine's "S curve" centered over the pelvis.

Physical conditioning is important. Extra weight means extra strain on the back. Even ten pounds can make a difference on the strain transferred to your back. Stress can play a part in muscle spasms so it is important to take time to relax. In

Proper lifting technique is critical to back safety, but perhaps more important is proper planning.

addition, repetitive motion can contribute to back problems.

Back injuries can also occur off the job and non-work related factors can contribute to back problems. Hobbies and leisure activities often prove to be a source of back strain, so it's important to keep yourself in good physical shape and monitor all of your activities off the job as well.

Also consider that not all back injuries are a result of sudden trauma; many are of a cumulative type, where a repeated minor injury has flared up, or continued use of a heavy tool in the same position has caused pain, or a great deal of time is spent in the same position.

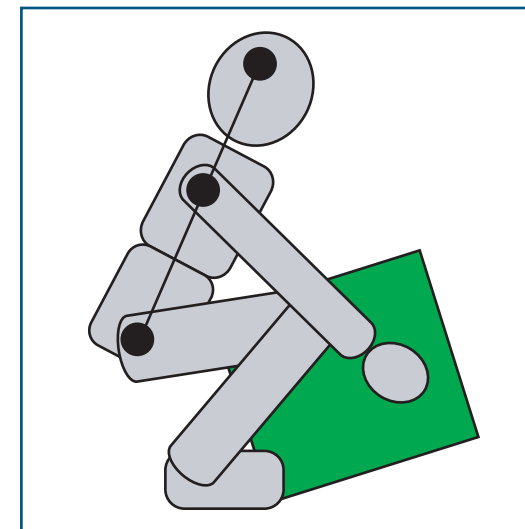
By using the correct lifting posture, you can avoid back injury. Rules of proper lifting include:

- Size up the load before lifting—test by moving a corner or pushing the load.
- Bend the knees when lifting—let your legs do the work.
- Place feet close to the object and center yourself over the load.
- Lift straight up in a smooth motion.
- Do not twist or turn your body once the lift is made.
- Make sure there is a clear path—don't fall over something you can't see.
- Set the load down properly (with your legs).
- Always push a load that is on a cart—never pull it.
- If it is a long object, get some help.
- Split the load into smaller loads if possible.

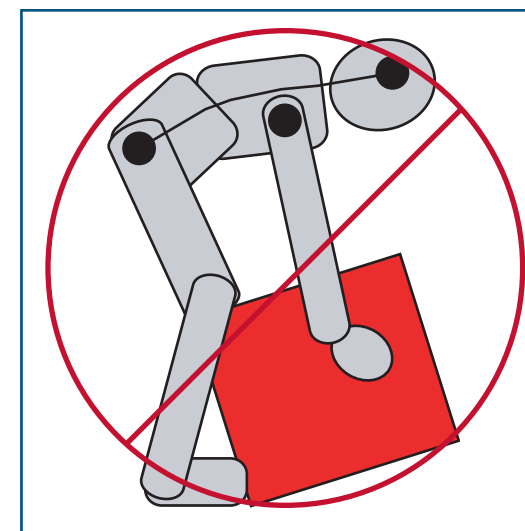
Proper lifting technique is critical to back safety, but perhaps more important is proper planning. Before you lift that box, tool, piece of equipment, lumber or truss, take a moment to consider your action:

- Do you need to lift the item manually?
- How heavy is it?
- Where are you moving the item from?
- Where does it have to go?
- What route do you have to follow?

Many times the item you are moving could be moved with a piece of equipment such as a dolly or a forklift. Consider using mechanical help wherever possible. If the item needs to be moved manually, and it is heavy or ungainly—like a truss or wall panel—ask for help! When using mechanical help, remember to push, not pull—you'll have more control, and greater leverage. Also be sure to fasten the load to the equipment, so sudden stops or rolling vibrations don't cause it to fall off.



correct lift



incorrect lift

When moving an item from a hard-to-reach place, be sure to position yourself as close to the load as possible. Slide it out to get it closer, and be sure that you have adequate room for your hands and arms. Be aware of adjacent obstructions on either side or above the load. Think about where the item will be placed once you've lifted it: will it be overhead? On a shelf? Under an overhang? In a narrow spot? Try to allow yourself as much room as possible to set the load down. You can always shift it slightly later. Check your path from place to place so that you can remove tripping hazards and protect openings. Make sure that the lighting is sufficient to see where you are going. Also, stabilize uneven or loose ground, or choose an alternate route. The shortest way isn't always the fastest, or the safest.

As always, moderation and balance are important considerations in the care and maintenance of your back. According to the National Institute for Occupational Safety and Health (NIOSH), back injuries cost American industry 10 to 14 billion dollars in workers' compensation costs and about 100 million work days annually. A healthy lifestyle—attention to posture, conditioning and body mechanics, avoiding obesity, alcohol, drugs and smoking, and minimizing stress—will help you in maintaining a healthy back! **SBC**

hol, drugs and smoking, and minimizing stress—will help you in maintaining a healthy back! **SBC**

To pose a question for this column or to learn more about WTCA's Operation Safety Program, contact WTCA Staff at 608/274-4849, email wtca@woodtruss.com, or view the Operation Safety demonstration online at www.wtcatko.com.

at a glance

- ☐ Attention to posture, conditioning, avoiding obesity, alcohol, drugs, smoking, and minimizing stress will take help you in maintaining a healthy back!
- ☐ Truss plants have many awkward loads to lift and carry, so lifting care is very important.

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—Pat McGowan, Vice President of Operations, Brunsell Lumber & Millwork, Madison, WI

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Economic Environment

A Comparison of Global Lumber Manufacturing Costs

Take a few minutes to compare U.S. lumber manufacturing costs with those of competitors around the world.

by Al Schuler

As discussed in the March issue, U.S. wood product manufacturers are being impacted by global events much more than a decade ago. In this article, we'll compare U.S. lumber manufacturing costs with competitors around the world. Today almost 40 percent of our softwood lumber consumption is imported, up from 25 percent since 1990. Although Canada supplies most of the imports, there are increasing volumes of framing lumber from Europe and industrial grades from the southern hemisphere. U.S. exports have fallen by almost 50 percent in the past five years. Both the U.S. and Canadian lumber industry are consolidating to address competitive issues, and this is altering lumber markets—changes in distribution, selling and other aspects of doing business.

Global Comparison

Figure 1 provides a comparison of global manufacturing costs. The U.S. was the high cost producer of lumber while Brazil, Chile, New Zealand and Central Europe were vying for low cost status. Although we are comparing apples to oranges with different grades, dimensions and species in each region, similarities exist: SYP in the U.S. South and South America, Spruce/Pine in Central Europe, Russia and Canada. The data in Figure 1 represent industry averages for various geographic regions—averages across all grades, species and dimensions.¹ For the most part, lumber producers all over the world are not making inordinate amounts of money (EBITDA—earnings before interest, taxes, and depreciation). That is, lumber is often a low margin business. Higher wood costs are the main reason for the high cost position of U.S. mills. If you are a high cost producer, a sound business strategy may be to reduce your exposure to commodity products while putting more emphasis on value added products. Competition wasn't as much a problem before globalization; mills in the U.S. South competed with mills in the Pacific Northwest and Canada, but today they compete with low cost mills all over the world.

North American Comparison

Again, we are comparing apples and oranges. Product mix can differ from one producing region to another. Here are some examples:

- Due to size of the timber, there are larger production volumes of higher margin products like wide dimension (2x8 - 2x12) and long lengths (22' and 24') in the U.S. West and B.C. Interior compared to eastern Canada and the South.
- SYP has inherent physical properties that provide favorable treating economics, consequently, about 40 percent is treated compared with much lower volumes for other softwood species.
- Due to the inherent strength of SYP, a higher proportion of the production meets "stress grades" standards.
- Transportation costs to consuming destinations provide advantages and disadvantages to various producing regions.

¹ These cost comparisons are for 2002 data. Since then, the USD has fallen against each of the currencies of the competing regions thereby improving U.S. competitiveness. Unfortunately, I don't have 2004 fiber and mill costs to complete an analysis based on 2004 data. That data will become available by mid 2005 when WMM, Price Waterhouse Coopers and Beck Consulting complete their global lumber benchmarking study.

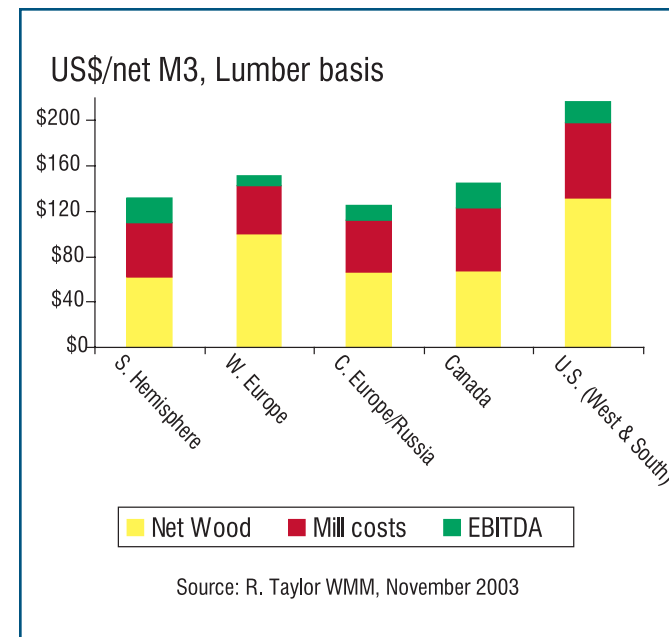


Figure 1. Global Sawmilling Costs (2002 basis). The U.S. was the high cost producer. **Note:** Net wood costs are wood costs after accounting for residue income (i.e., net of residue income). Mill costs include labor, energy, etc. (all variable costs except wood). Mill cost rankings (low to high): 1) S. Hemisphere, 2) C. Europe/Russia, 3) Canada, 4) W. Europe, 5) U.S.

For a more relevant comparison that deals with some of these issues, RISI (Resource Information Systems, Inc., part of the Paperloop Group) developed Product Variable Costs, which compares the variable costs of manufacturing 2x4s on FOB Mill basis in different geographic regions (see Table 1). This comparison demonstrates that on a pre-duty basis, Canadian producing regions have some cost advantages.

DF Green (del. Portland)	\$291	U.S. West
Inland HF	\$301	U.S. West
SYP	\$295	U.S. South
WSPF	\$245	Canadian West
ESPF (del. Grt. LK)	\$310	Canadian East

Table 1. Product Variable Costs (US\$/M, FOB, Mill, 2X4) - 2004 basis. [Source: RISI (North American Lumber Forecast, December 2004)]

In Figure 2 (on page 23), we compare industry-wide costs delivered to Chicago, and can see clearly the impact of the duty on the Canadian cost position. Of course, not everyone ships to Chicago. For example, Eastern Canadian mills often ship to closer U.S. east coast and southeast destinations. The Canadian dollar (CAD) appreciated about 20 percent between 2002 and 2004, and we show the added impact of a further strengthening in 2005, (about eight percent)—in essence, the stronger CAD translates to less revenue (or higher costs if you prefer) on shipments to the U.S. The CAD

Continued on page 24

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at a glance

- ❑ The U.S. lumber producers are in general the high cost producers when compared to their foreign counterparts.
- ❑ The softwood lumber tariff creates a two-tiered lumber market that allows Canadian component manufacturers to buy lumber cheaper than their U.S. counterparts, creating a competitive advantage when shipping to the U.S.

Economic Environment

Continued from page 23

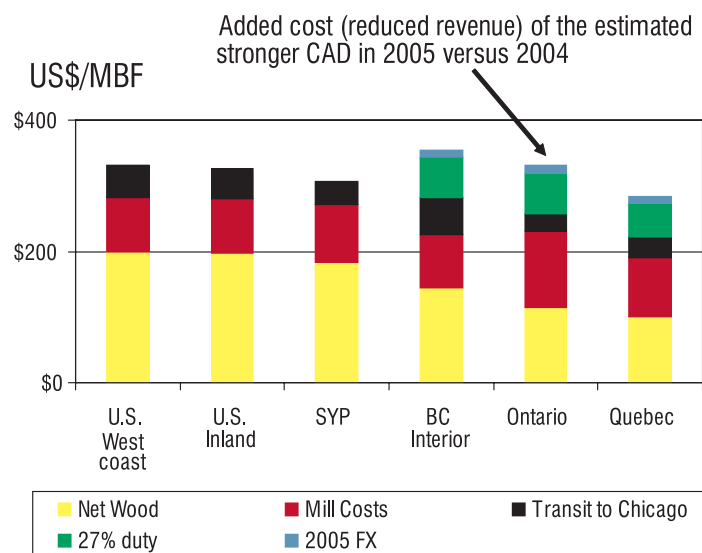
is expected to remain strong through 2005 as the U.S. current account deficit puts downward pressure on the USD (U.S. Dollar) while robust world commodity prices support the CAD (see Jan/Feb **SBC**). The comparisons shown in Figure 2 help explain why Canadian mills are having serious margin problems, and any slip in U.S. prices (from a slower housing market for example), could result in reduced production from higher cost mills.

Conclusions

U.S. sawmills are facing increasing competition from offshore sources, but the duty and the stronger CAD are keeping many U.S. mills competitive with their Canadian counterparts. This should be only a temporary advantage; the duty issue will be resolved eventually, and the consensus is that the new duty, if any, will be lower than 27 percent. In addition, the CAD is expected to peak this year, and the consensus opinion is that it will weaken in the future for a variety of reasons. U.S. mills need to consider adding more value to their product mix (move up the value chain), consolidate to capture scale economies, invest more to reduce costs, and

be aware of new competitive threats from offshore.

CMs should stay current on the duty issue and CAD fluctuations because they impact Canadian sawmill costs, U.S. lumber prices indirectly, and even the competitive position of Canadian manufacturers. For example, the strong CAD and



Source: RISI, NA Lumber Forecast, December 2004

Figure 2. North American Industry cost comparisons for various geographic regions - 2004 basis, delivered Chicago.

Two Tiered Lumber Market

Price Differential (U.S. Price – Canadian price, US\$/M)

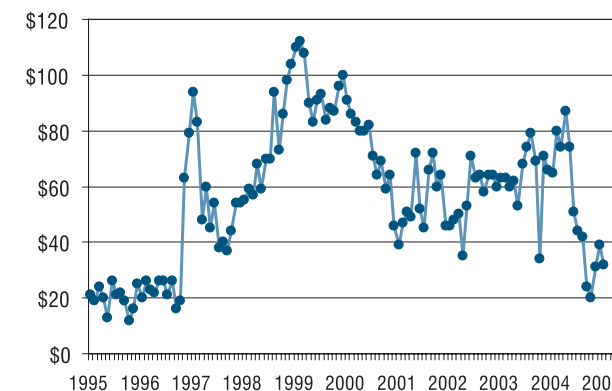


Figure 3. Two-tiered market showing price spread (USD) between the U.S. price, delivered U.S. destination, and Canadian price (USD), delivered Toronto, for ESPF, 2x4.

duty is forcing Canadian mills to divert some shipments from U.S. destinations to Canadian destinations simply because margins are being squeezed (a pullback in U.S. housing would exacerbate this situation). The Canadian market then becomes oversupplied or saturated, resulting in lower lumber

prices in Canada. This is called a "two-tiered market" as Canadian SPF prices in Canada (USD basis) can be significantly lower than SPF prices in the U.S. (Figure 3). During 2004, after converting to USD, the spread for Canadian Eastern SPF, KD, 2x4, delivered Toronto versus delivered, Great Lakes (a U.S. destination), ranged from \$87/M to \$20/M. During 2004, Canadian component manufacturers paid about ten percent less for SPF (USD basis) than their U.S. counterparts, lowering their manufacturer's costs and making them more competitive when shipping to U.S. customers. This puts the unintended consequence of no duty on Canadian manufactured components/trusses shipped to the U.S. in front and center view and explains why it is difficult for component manufacturers to create long-term business plans. The uncertainty from day-to-day, month-to-month and year-to-year is illustrated in Figure 3. **SBC**

Al Schuler works for Forestry Sciences Lab in Princeton, WV. Please note that the economic information/opinions contained in this article are not necessarily those of the USDA Forest Service. Dr. Schuler can be reached at 304/431-2727 or aschuler@fs.fed.us. His economic information can also be found at www.sbcmag.info.

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TM-1882



Bcmc 2005

QRM to the Rescue!

The line-up for BCMC educational tracks is in the final planning stages. Find out more about what's in store for you this fall in Milwaukee!

by Don Groom, BCMC 2005 Chair

Each year, BCMC continues to educate its attendees on and off of the show floor. This year is no different. In conjunction with the three tracks, each session is carefully laid out and is integral to the show as well as what matters most to you. With another highly anticipated seminar line-up, attendees will easily *Ride on Tradition and Innovation*.

Quick Response Manufacturing (QRM) is one of the three tracks to be featured this year at BCMC. Frank Rath, Associate Director of the Center for Quick Response Manufacturing, of the University of Wisconsin, Department of Engineering Professional Development, is set to enlighten attendees on the advantages of implementing QRM. QRM is an approach to manufacturing that provides solutions for production volume that varies or for highly customized manufacturing. Just like JIT (just in time) and lean manufacturing methods work well for high-volume, repetitive production, attendees will learn about another approach to manufacturing management that they can use to become more effective and efficient. This track will be moderated by a component manufacturer and will focus on implementing the principles of QRM in a truss operation.

So what is QRM? QRM is a company-wide philosophy that gives you a set of principles, methods and tools to reduce lead time in all of your operations. QRM is universal and can be applied by anyone in your company. The key to competitiveness in today's global manufacturing environment is speed. The ability to adapt—to be agile and fast—can give you an edge, especially when your customers want customized products in a hurry. Reducing lead time throughout your organization, from order entry and engineering through manufacturing and shipping, is the most effective way to use speed as a competitive advantage.

The following are some of the concepts you'll learn by attending this seminar.

- Shorten lead times to design and produce jobs
- Reduce manufacturing costs
- Increase labor productivity
- Eliminate costly excess inventory
- Cut waste and inefficiency
- Boost product quality

Building your business and bottom lines are what QRM comes down to. This customized program will show you how these principles can be used within your operation to help you evolve and have even greater success.

In today's market, time, speed, dependability and accuracy are parts of the key ingredients for component manufacturers to build a successful business. Often-times, design, inventory control and lead time reduction do not intermingle as you would like them to. Our builder customers face a wide variety of specific needs and demanding deadlines, and in turn, you have to meet these with unique products for each demand. This track will provide ideas to help you address this challenge. As always, the BCMC Committee strives to plan educational sessions that provide solutions and ideas for component manufacturers. **SBC**

Source: How to Implement Quick Response Manufacturing. University of Wisconsin - Madison Center for Quick Response Manufacturing.

at a glance

- ❑ The goal of Quick Response Manufacturing (QRM) is to allow for efficient manufacturing while producing customized products.
- ❑ The key to remaining competitive is reaction time and speed.



IT'S NOT JUST THE IDEAS BUT ALSO THE EXPERIENCE THAT PROVIDES GREAT INSIGHT

MARK YOUR CALENDAR FOR BCMC 2005 IN MILWAUKEE WI

2002 *It was by far the best show I've ever been to. I brought six guys, each from a different department, which was the largest attendance ever from Plum Building. We each went to different seminars and realized we aren't alone in this industry. There are people all over experiencing the same challenges that we are. And fine-tuning the seminars to be given by members of the industry was brilliant. Thanks for a great show!*
Mr. Richard P. Parrino - Plum Building Systems

2003 *You never know what or when you're going to learn something at the CM Roundtable discussions. There is so much to soak up in three days, it allows me to evaluate ideas heard and put them to good use. It benefits the business in several ways from different manufacturing ideas, to legal issues/ideas, to truss designs. The verity of people that attend, brings fresh ideas into the discussion. The more ideas that are discussed benefits everyone. I think it's an excellent idea and hope that people continue to attend.*

Mr. David Mitchell - Engineered Building Design

2004 *By attending BCMC Programs, we were able to network with component manufacturers. The contacts we have made have proven to be invaluable and extremely helpful in our business. Being able to consult with component manufacturers who have dealt with an issue that we are facing has saved us, in some cases, many hours of research. Without the connections made at BCMC this would not have been possible.*

Mr. Don Groom - Stark Truss

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Wtca Update

Proper Construction of Wood Framed Gable End Walls with Wood Roof Trusses

by WTCA Staff

Questions about framing gable end walls with scissors or vaulted ceiling roof trusses is a frequent topic for WTCA's technical department. BCSI-B6 was created to help!

One of the common questions that we have to address is the common practice of incorrectly framing gable end walls when scissors or vaulted ceiling roof trusses are used. This article provides our industry's current guidance on this issue.

WTCA's publication BCSI-B6 Gable End Frame Bracing is intended to provide general considerations and details surrounding the proper bracing of gable end conditions. A B6 summary sheet is also available, which is intended to guide framers. For web site links to each of these documents go to **Support Docs** at www.sbcmag.info.

The key issues regarding gable end wall-bracing follow:

1. The Building Designer (i.e., the Owner, Architect, Engineer or Contractor of the Building) knowing the intended flow of loads for the entire building, is responsible for taking the resultant loads from the gable end frame and transferring the loads to the footings. This may involve transferring the loads through additional bracing from the gable end frame to the roof and ceiling diaphragms (e.g., roof sheathing and gypsum ceiling).
2. The effect of wind on an improperly braced gable end wall can be seen in the Figure 1 (BCSI-B6 graphic).

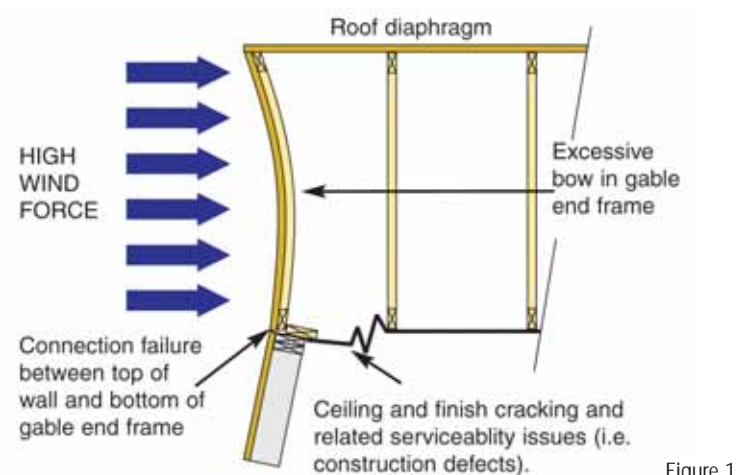


Figure 1.

3. The goal of gable end wall bracing is to provide resistance to high wind forces in a manner similar to the graphic that follows. Ultimately, how this bracing is actually detailed for the structure is the responsibility of the Building Designer (see Figure 2 on page 29 - BCSI-B6 graphic).
4. In the field, it is standard practice for carpenters to frame the gable wall top-plate at the same height as the nearby bearing wall top-plate height. Then they install a flat bottom chord gable truss on top of this wall top-plate. Using this framing technique, the gable wall top-plates will not match the ceiling planes of an adjacent scissor or vaulted truss. This will cause a hinge effect under certain wind loads as shown in Figure 3 on page 29.

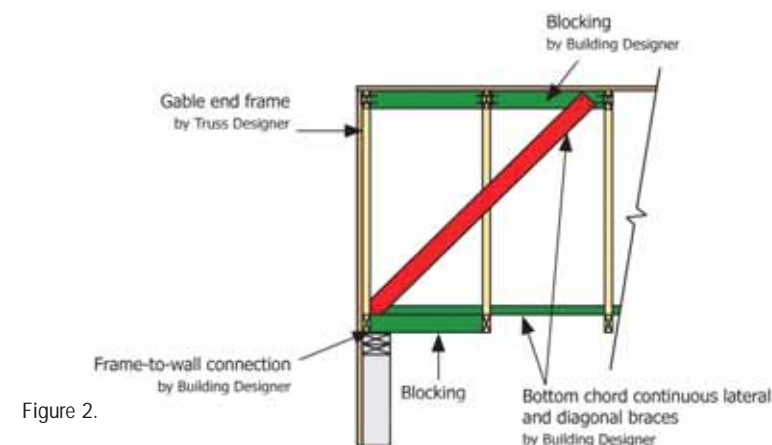


Figure 2.

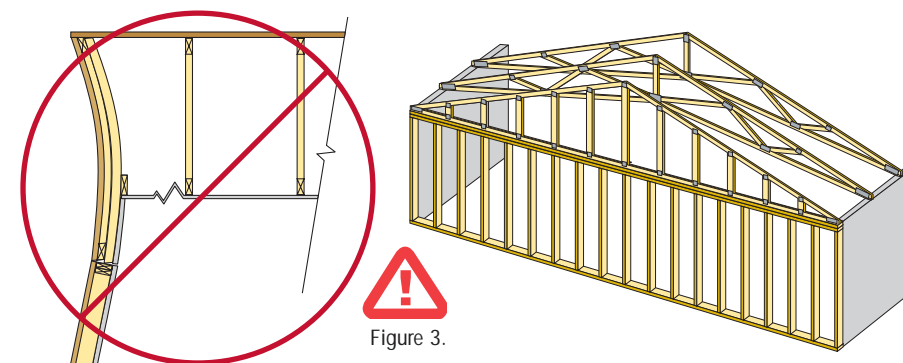


Figure 3.

5. This situation can be resolved by constructing a gable end wall that matches the ceiling profile of the cathedral or vaulted ceiling, using full height studs extending up to the bottom chord of the gable end truss. The truss manufacturer can then construct a gable end truss with the same profile as the adjacent roof truss. A wood nailer must then be added to the top of the wall to support the ceiling finish. This is illustrated in Figure 4 below. An added benefit to this is the reduced risk of a crack developing in the corner of gypsum ceilings due to wood shrinkage.

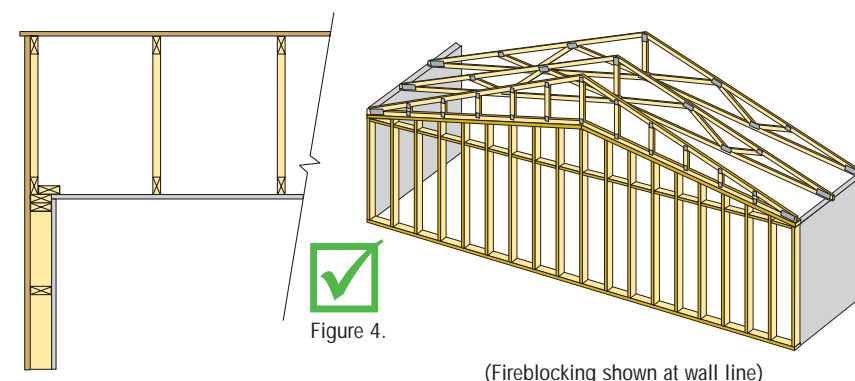


Figure 4.

Note: IRC R602.8 Fireblocking required. Fireblocking shall be provided to cut off all concealed draft openings (both vertical and horizontal) and to form an effective fire barrier between stories, and between a top story and the roof space. Fireblocking shall be provided in wood-frame construction in the following locations.

1. In concealed spaces of stud walls and partitions, including furred spaces and parallel rows of studs or staggered studs as follows:
 - 1.1. Vertically at the ceiling and floor levels.
 - 1.2. Horizontally at intervals not exceeding 10 feet (3048 mm).

Continued on page 30

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at a glance

- ❑ Gable end bracing design is the responsibility of the building designer.
- ❑ The Wood Frame Construction Manual provides prescriptive guidance on for the size, spacing and length of gable end wall studs to resist bucking due to wind loads.
- ❑ BCSI B6 Gable End Frame Bracing is intended to provide general considerations and details surrounding the proper bracing of gable end conditions.

6. Since many of these walls will be constructed with studs taller than 8 or 9 feet, stud buckling and bending due to wind may become a design issue. It may become necessary to increase the stud size or decrease the stud spacing. The Wood Frame Construction Manual (WFCM), which is referenced in the IBC section 2301.2.3 and IRC section 301.1.1 for conventional light frame wood construction provides stud spacing, size and height guidance (see WFCM Tables 3.20A&B for Exposure B and Tables A3.20A&B for Exposure C. Exposure Categories are defined in the IRC section R301.2.1.4 and IBC section 1609.4. Exposure B is the default category unless the site meets the definition of another exposure. Exposure B is for typical urban and suburban sites or wooded areas that have obstructions about the size of single family dwellings or larger.

- Table 1 below applies to the following field conditions:
- Foam sheathing can be used everywhere except within 4 feet of the end wall corners.
 - Foam sheathing can be used within 4 feet of each end wall corner, if studs are spaced at 0.85 times the table's stud spacing.
 - The stud spacing for the wall can be the same across the entire wall, if 3/8 inch wood structural panels are applied within 4 feet of each end wall corner.

If your field conditions do not meet the foregoing conditions of use for Table 1, it will be necessary to contact the Building Designer to determine the proper stud size and grade to transfer the load to the foundation. Additionally, longer studs, than those found in this table, can easily be designed to meet your application. **SBC**

To order BCSI documents, visit www.woodtruss.com/pubs.

Maximum allowable stud length for gable endwalls for interior zone loads.

(Based upon WFCM 2001, Tables 3.20A)

Apply to either of the following conditions per footnotes:

Table 3.20A, a - "Maximum stud lengths in Table 3.20A are based upon interior zone loads and assume that all studs are sheathed with minimum sheathing material. Studs within 4 feet of corners shall be sheathed on the exterior with a minimum of 3/8 inch wood structural panels and on the interior with minimum sheathing material, or stud spacings shall be multiplied by 0.85 for framing located within 4 feet of corners to account for the additional end zone requirements. The additional bending capacity provided by the wood structural panels or reduced stud spacing is assumed to be sufficient to resist the additional end zone loading requirements."

(minimum exterior sheathing would include foam, fiber, or gypsum sheathing)

(minimum interior sheathing would include gypsum board thickness based upon stud spacing)

(wood structural panels would include plywood or OSB)

Length is given in ft-in. Maximum allowable stud length is 20 feet.

Stud Spacing (in.)	Species	Grade	Wind Speed (3 second gust) Exposure B								
			90			100			110		
			2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8
12	Hem-Fir SPF SP	#3/Stud	14-0	20-0	20-0	12-6	18-9	20-0	11-3	17-0	20-0
		#3/Stud	14-0	20-0	20-0	12-6	18-9	20-0	11-3	17-0	20-0
		#3/Stud	14-11	20-0	20-0	13-4	20-0	20-0	12-1	18-4	20-0
	Hem-Fir SPF SP	#2	14-7	20-0	20-0	13-6	20-0	20-0	12-8	20-0	20-0
		#2	14-11	20-0	20-0	13-11	20-0	20-0	13-0	20-0	20-0
		#2	15-8	20-0	20-0	14-6	20-0	20-0	13-7	20-0	20-0
16	Hem-Fir SPF SP	#3/Stud	12-0	18-0	20-0	10-8	16-1	20-0	9-8	14-6	18-9
		#3/Stud	12-0	18-0	20-0	10-8	16-1	20-0	9-8	14-6	18-9
		#3/Stud	12-10	19-6	20-0	11-5	17-5	20-0	10-4	15-8	20-0
	Hem-Fir SPF SP	#2	13-2	20-0	20-0	12-3	19-8	20-0	11-5	18-5	20-0
		#2	13-6	20-0	20-0	12-7	20-0	20-0	11-9	18-10	20-0
		#2	14-2	20-0	20-0	13-2	20-0	20-0	12-4	19-9	20-0
24	Hem-Fir SPF SP	#3/Stud	9-8	14-6	18-8	8-7	12-11	16-8	7-9	11-8	15-1
		#3/Stud	9-8	14-6	18-8	8-7	12-11	16-8	7-9	11-8	15-1
		#3/Stud	10-4	15-8	20-0	9-3	14-0	18-1	8-4	12-7	16-4
	Hem-Fir SPF SP	#2	11-5	18-4	20-0	10-7	17-1	20-0	9-11	15-6	20-0
		#2	11-9	18-10	20-0	10-11	17-6	20-0	10-2	15-9	20-0
		#2	12-3	19-9	20-0	11-5	18-4	20-0	10-8	16-7	20-0

Table 1.

WTCA Publications
Changes

Take note of the following recent changes to WTCA publications. Four documents in the Truss Technology in Building (TTB) series will no longer be sold; instead, they will be provided at no charge in printable PDF format on the web site:

- Commentary to National Design Standard and Recommended Guidelines on Responsibilities for Construction Using Metal Plate Connected Wood Trusses
- Fire Rated Truss Assemblies
- Lumber Grades
- Sprinkler Systems & Wood Trusses

The National Design Standard and Recommended Guidelines on Responsibilities for Construction Using Metal Plate Connected Wood Trusses has been retitled, *Standard Responsibilities in the Design Process Involving Metal Plate Connected Wood Trusses*. The following text was added to the front page of the brochure:

"In 1995, the Wood Truss Council of America (WTCA) published WTCA 1-1995, *Standard Responsibilities in the Design Process Involving Metal Plate Connected Wood Trusses*. WTCA 1-1995 was published through an open consensus based committee approach and provided a guideline involving responsibilities associated with the use of metal plate connected wood trusses in construction. As of November 2004, WTCA 1-1995 has been incorporated into Chapter 2 of the ANSI/TPI 1-2002 consensus standard and as such is part of the IBC and IRC building codes where ANSI/TPI 1-2002 is referenced. The following text has been reproduced from ANSI/TPI 1-2002, Chapter 2 with permission from the publisher, the Truss Plate Institute (TPI), www.tpinst.org."

Component manufacturers now have more than one option for printing plans on a plotter. The B1 Summary Sheet on a roll is now available in two- and three-inch core sizes, both with 144 impressions per roll (24"x150').

Consult the WTCA Products and Services catalog (polybagged with the April issue of SBC) for detailed descriptions of all products. Visit www.woodtruss.com/pubs to place your online order today. **SBC**

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For more information about membership in WTCA, contact Anna (608/310-6719 or astamm@qualtim.com) or visit www.woodtruss.com. Listing as of April 13, 2005.

THE TTT LEVEL I EXPERIENCE: NEW & IMPROVED

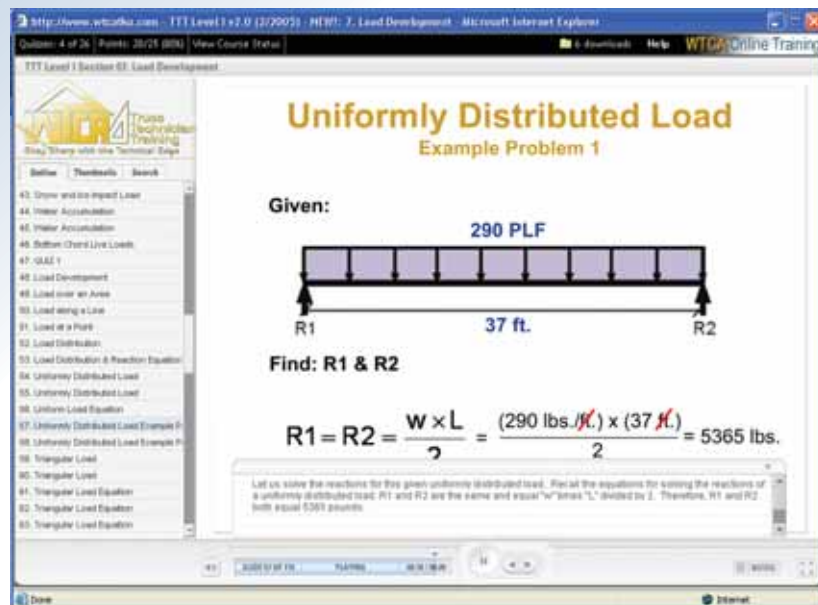
by WTCA Staff

WTCA's online Truss Technician Training (TTT) Level I course saves time and money while providing employees with top notch training. Now the Level I course is new and improved and enrolling more students than ever!

An online version of WTCA's Truss Technician Training (TTT) Level I course was unveiled in August 2002. The content for this course was derived from four-day live seminars that WTCA staff had conducted across the country since 1996. TTT Level I online, with the additions of Level II and Level III has been a huge success and technicians across the country are becoming more educated on design and engineering fundamentals because of these courses.

By the Numbers

Before TTT Level I online was created and live classes were the only option, only 715 students attended in over six years. As of the end of 2004, 1487 students had enrolled in the original online course. So far 2005 is on pace to be our best year yet, with 888 students currently enrolled. Online training is definitely the wave of the future.



The new interface allows students to jump around easily and to view all spoken dialogue.

at a glance

- ❑ 2375 students have enrolled in the TTT Level I online course since August 2002.
- ❑ Version 2.0 is faster, easier to navigate, includes all dialogue text, and holds the user's attention better with twelve different narrators.
- ❑ Version 2.0 breaks sections into smaller bite-size pieces followed by quizzes to reiterate and review material.

Change is Here

In February, WTCA introduced a revised version of Level I known as Version 2.0. The content has been updated and the technology that runs the program has been vastly improved. The new version is faster and easier to navigate.

One of the more significant updates to the course content is that the program now references *ANSI/TPI 1-2002 National Design Standard for Metal Plate Connected Wood Trusses*, updated from the 1995 version of the standard.

There is also a greater variety of narrators in this version, which works to increase the student's engagement in the program. Specifically, Version 2.0 contains twelve different speakers throughout the ten sections compared to just four in the previous course. In this newer version, we also tried to bring the presentation to life with added animation on screen.

In addition to the increased variety in narrator voices, eleven more quizzes have been added to the course to give students an even greater opportunity to prepare for the Level I Certification Exam. Version 2.0 now breaks each of the ten course sections into smaller chunks with the use of these quizzes. In most of the previous version's sections, students were quizzed at the end once all the material was presented. Research has shown that students retain more when smaller amounts of



material are presented and reviewed. Sections are now broken into as many as twelve parts before a student is quizzed on information previously presented.

One of the most useful features of the new version is the ability to view exactly what is being spoken. Students will no longer have to review one slide multiple times to hear exactly what was said; instead they can read the script by clicking on a **NOTES** button. Course materials can now be downloaded from the presentation as well. All the pertinent information is now contained within each course section.

It is our hope that with the introduction of this speedier user-friendly interface, enrollment in TTT Level I online will increase. If you are currently enrolled, please share your experience with Version 2.0 with others. We will compile all responses and print them in an upcoming *SBC* issue. **SBC**

Plans are in the works to update TTT Level II to this new interface in the second half of 2005. If you are interested in TTT, check out www.wtcatko.com or call us at 608/274-4849.

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Across the Board

WTCA Open Quarterly Meeting:
February 25, 2005, Atlanta, GA

WTCA's February Open Quarterly Meeting (OQM) was productive and well-attended. Find out more about the issues affecting your association.

by WTCA Staff

The first Open Quarterly Meeting (OQM) of 2005 was opened by WTCA President Kendall Hoyd. After introductions and opening remarks were completed, the October 2004 meeting minutes were approved by the Board. Hoyd then outlined the Board's focus for 2005 by explaining that the WTCA Board is responsible for addressing key industry issues, creating and modifying WTCA policies, and appropriating funds for industry projects. All the project work that needs to be done to meet Board objectives will be handled by the committees.

Current/Emerging Issues (Chapter Reps)

- Members in southern Nevada are working with the E&T committee to resolve building code issues regarding uplift and lateral loading.
- In Wisconsin, the hot topic is chemicals on treated wood and their interaction with truss plates. This topic is on the TPI TAC and WTCA E&T Committee agenda.
- Members in Illinois and California continue to face problems with transportation regulations and enforcement. The Management Committee is creating a guide for transporting trusses.

Executive Committee Report (Kendall Hoyd)

- The Board unanimously approved creating a new Builder Member Category to meet the needs of Builders wanting to use Truss Knowledge Online (TKO) programs.
- A policy regarding action WTCA should take following a Natural Disaster was unanimously approved.
- The Board unanimously voted to accept two new WTCA Chapters: Minnesota Truss Manufacturers Association (MTMA) and Western Component Manufacturers Association (WCMA). Welcome to both chapters!

Treasurer's Report (Don Groom)

- Revenues exceeded the budget in 2004.
- WTCA is fiscally sound and has the ability to invest more significantly in activities designed to strengthen our industry, both short term and long term.
- The 2005 budget includes significant investment in our chapters. Staff will travel to each chapter meeting four times each year with the goal of becoming more in tune with local membership needs. WTCA will also begin to invest in industry-focused research with the goal of developing industry policy and providing solid data for changes that will serve the best interests of all component manufacturers.
- The Treasurer's Report and 2005 budget were unanimously approved.

Nominating Committee Report (Dan Holland)

- Priscilla Becht (South Florida Chapter), Rick Cashman (West Florida Chapter), Dave Walstad (Mid Atlantic Chapter) were welcomed to the Board as Directors Representing Chapters.
- Bob Becht of Chambers Truss was nominated as the 2005/2006 Secretary.
- Ken Cloyd (California Truss) and Frank Klinger (Mid-Valley Truss & Door) were added to WTCA's Executive Committee.
- All elections were unanimously approved by the Board.

Continued on page 36

Protect Your Risk

New Documents in the WTCA's Jobsite Package Provide Additional Information on Responsibilities and Safety Measures Out in the Field



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at a glance

- ❑ Two new chapters were welcomed to the WTCA family: MTMA & WCMA.
- ❑ Bob Becht was nominated as the 2005/2006 Secretary and five other individuals assumed new posts on the board.
- ❑ At the August OQM in Denver, members will provide video testimonials, with a focus on WTCA publications.
- ❑ New tools are in the works to help members sell the benefits of membership.

Across the Board
Continued from page 34

TPI Board Meeting Report (Dan Holland)

The discussion topics included:

- Agreement by the TPI Board to work with WTCA's QC best practices effort and make changes to the ANSI/TPI 1 QC standard as needed to implement these changes immediately.
- TPI will again sponsor BCMC signage, lanyards and tote bags and may also sponsor "You Are Here" signage on the show floor.
- The joint publications agreement increased TPI's revenue by 38 percent over the 2004 budgeted income.
- Work continues on the moment equation analysis, which remains TPI's top priority.
- TPI's second priority is its QC business plan.

- BCMC (Staff)
- The exhibitor promotion was mailed March 9.
 - The Kickoff speaker will focus on being upbeat and humorous.
 - Three educational tracks will be offered: Costing, Quick Response Manufacturing (see **BCMC Update** on pg. 26) and Customer Relationship Management.
 - The Economic Forecast will again be delivered by Stan Duobinis.

- SBC Magazine (Staff)
- Many thanks to **SBC** advertisers for their support of YOUR industry publication!
 - The magazine has begun a "One Minute Poll," which has proven to be very effective in gathering industry data and opinions for **SBC** articles. For those who participate in these, your feedback is valuable and appreciated.

- Key Industry Supplier Update: Lumber (Joe Kusar/Cathy Kaake)
- On the Softwood Lumber front, Grant Aldonas will stay on for another 30 days with the hope of presiding over a resolution.
 - The Department of Commerce is hoping Canada will make an offer.

- Key Industry Supplier Update: Engineered Wood Products (Gary Dunn)
- WIJMA is working on a resource guide to take to fire service schools regarding the performance of EWP.
 - East Hills, NY has banned trusses and certain EWP. WTCA and AF&PA are addressing the issue.
 - EWP manufacturers are meeting with adhesive manufacturers.

- Key Industry Supplier Update: Connector Industry (Steve Hanek)
- The connector industry is looking at multiple tie-down

connectors for multiple bearing surfaces. Watch for more solutions to deal with high uplift connectors.

- Key Industry Supplier Update: Truss Plates & Steel (Wayne Masengill for Charlie Hoover)
- Steel pricing has not been changing, even with higher energy costs and devaluation of the dollar. It was reported that there is hope the cost may lower in August.
 - TPI has a new Executive Director. Michael Cassidy assumed the position on December 16, 2004, and has moved the TPI headquarters to Alexandria, VA. TPI will continue to work closely with WTCA to coordinate industry activities.

- ICC Structural Committee Report (Staff)
- WTCA participated in the ICC Hearings as a member of the IBC Structural Committee. Positive relationships were formed.
 - Staff is currently working with the NCSEA (structural engineering associations) on revised language for our code change S165.

- Component Manufacturer Roundtable Report (Kendall Hoyd)
- Component manufacturers discussed the future of the component manufacturing business and how it should affect WTCA's name.
 - Discussion occurred regarding whether the "Wood Truss Council of America" the most accurate name to carry us into the future, in terms of the business we are involved in, or are we actually in the structural building components manufacturing industry?

- E&T Committee Report (Clyde Bartlett)
- A joint E&T/TPI TAC meeting was held January 20-21.
 - The key topics discussed were the Guide to Good Practice for Loading Metal Plate Connected Wood Trusses, the moment equation, changes to ANSI/TPI 1 for the 2007 version, and research priorities to improve truss design.

- Legislative Committee Report (Allen Erickson)
- The Legislative Conference will be held May 4-6, with a focus on immigration and softwood lumber. The conference will once again include member meetings with key government agencies.

Continued on page 38

Do You Know The True Cost of Doing Business?

Work Orders

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- ✗ Can you track every work order's true cost?
 - ✗ Direct Labor
 - ✗ Indirect Labor
 - ✗ Actual material used
- ✗ Are you tracking them or **are you bottom line averaging**?
- ✗ Can you compare estimated verses actual cost?

Labor Cost

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- ✗ Can you track the history? Who, did what, and when?
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- ✗ Can you reward productive employees based on actual effort?

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Across the Board

Continued from page 37

- District Meetings will also be scheduled between WTCA members and key congressional committee members at their home offices.
- WTCA will join the American Legislative Exchange Council (ALEC) to help craft legislative concepts.

Marketing Committee Report (Ken Cloyd)

- The committee reviewed all of WTCA's documents.
- At the summer OQM in Denver in August, members will provide video testimonials. The focus will be WTCA publications.
- A new general warning tag referring installers back to the JOBSITE PACKAGE will be created.
- A new companion brochure to the Products & Services CD will be created. (This brochure was polybagged with the April issue of SBC.)
- A subcommittee will address the subject of TTT recertification.

QC Committee Report (Dave Motter for Joe Hikel)

- The TPI Board will work with the WTCA QC Committee to revise the QC section of ANSI/TPI 1-2002.
- A motion was unanimously passed to send a request to the TPI Board asking that TPI rewrite the C_q portion of the standard to accommodate the Dial-In C_q factor which would eliminate the Tooth Count Method as a separate process and include it as part of the final steps in the Plate Placement Method.

Management Committee Report (Staff for Ben Hershey)

- The Transportation Guide is under development.
- An update on the development of a Standard Contract Addendum was given by Kent Pagel. A white paper approach will be taken.
- A subcommittee had been reviewing WTCA's policy that the organization should not create a standard contract form. The committee concluded that a standard contract form is neither feasible nor practical.
- One of WTCA's highest priorities for the year is the creation of an online Risk Management Program called ORisk. This program will be designed to serve both the rookie and the experienced component manufacturer. The goal will be to provide fundamentals education that will make the risk management seminar series more valuable to all attendees.

Membership Committee Report (Bob Becht)

- The committee concluded that the best approach to member recruitment is one-on-one communication.
- A quarterly summary report will be created to assist members with recruitment.
- A brief PowerPoint® program and script will be created to help members sell the benefits of membership.

Kendall Hoyd concluded the meeting with a special thanks to Past President Richard Brown of Truss Systems in Oxford, GA, for graciously hosting a plant tour and dinner during this OQM. (For photos from the tour see **Parting Shots** on page 90.) **SBC**

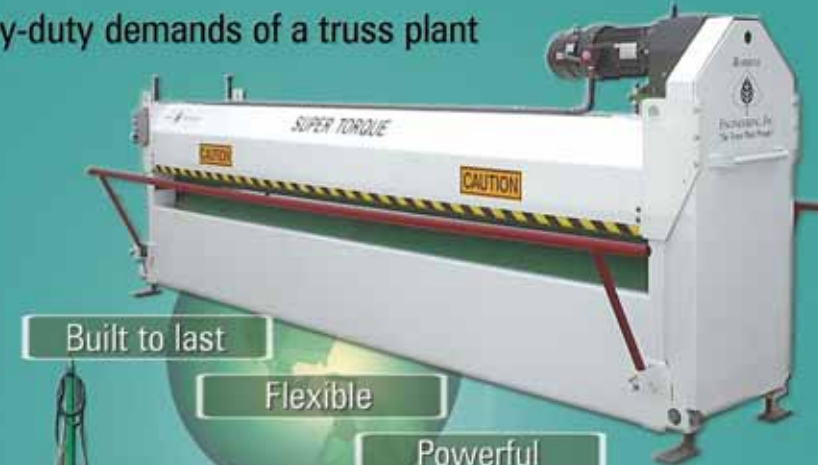
The next OQM will be held in Washington D.C. on May 4-6. Our third OQM will be held August 17-19 at the Hyatt Regency in Denver, CO. For details, contact WTCA Staff at 608/274-4849, wtca@woodtruss.com or visit www.woodtruss.com.

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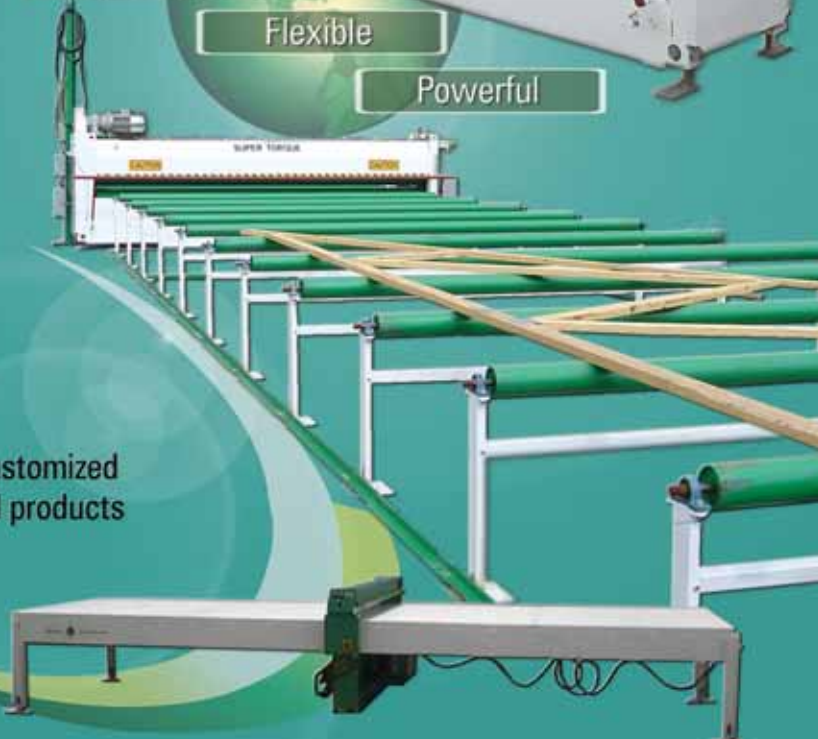
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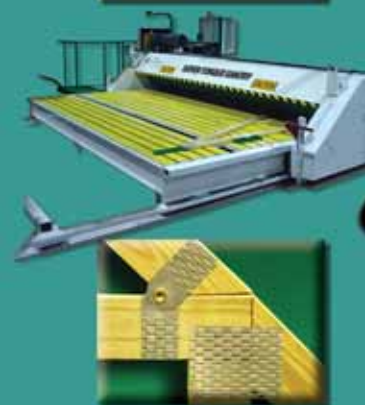
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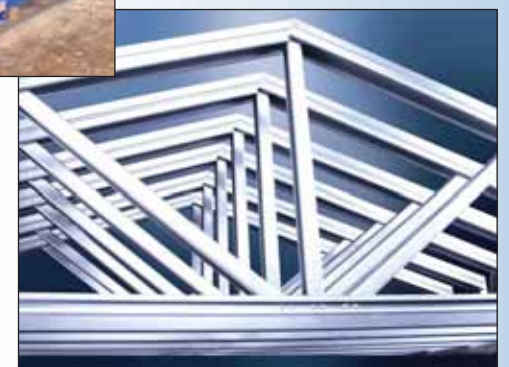
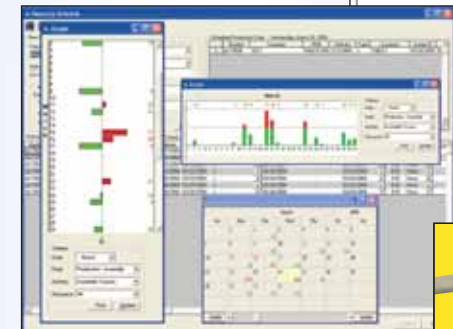
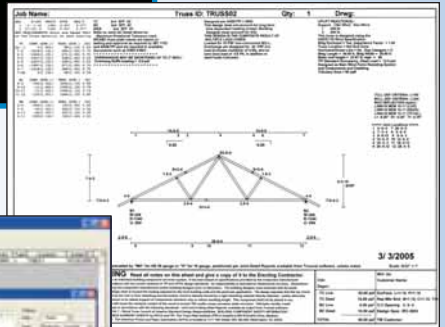
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Code Connection

Design Limitations

Good communication and familiarity with prescriptive requirements of the code lay the groundwork for a successful and efficient project.

by WTCA Staff

Truss design is mostly only limited by imagination. Truss manufacturing is mostly only limited by the physical constraints of manufacturing machinery and shipping.

Specific types of buildings are limited through prescriptive building codes (like the International Residential Code [IRC] and International Building Code [IBC] Section 2308) where there are defined building size and load limits.

The IRC limits its building scope (R101.2) to detached one- and two-family dwellings or multiple single-family dwellings (townhouses) not more than three stories in height with separate means of egress.

The following is a brief summary of some of the prescriptive code requirements of the IRC 2003:

- **Wind speed:** (R301.2.1.1.1) less than 110 mph (3-second gust)
- **Ground snow:** (R301.2.3) 70 psf or less
- **Seismic:** detailing only required for Seismic Design Category C, D1, D2 (R301.2.2), except that one- and two-family dwellings in Seismic Design Category C are exempt from the seismic requirements (Seismic Design Categories (A-E) are assigned in accordance with Figure R301.2(2))
- **Shape and size:**
 - *Roof pitch:* no limit per Table R301.6
 - *Building height:* Three stories (R101.2) plus story height requirements (R301.3) (about 34 feet to top plate line)
 - *Building width:*
 - for wood framing: 36 feet per header Table R502.5(1)
 - steel floor (R505.1), wall (R603.1.1) and roof framing (R804.1.1): 36 feet
 - *Building length:*
 - no stated limit for wood
 - steel floor (R505.1), wall (R603.1.1) and roof framing (R804.1.1): 60 feet

IBC 2304/2308 (Wood Light Frame Construction) is more restrictive than the IRC in some areas. The following is a brief summary of some of these requirements:

- Three stories above grade
- Bearing wall floor to floor height are not to exceed ten feet
- Loads are not to exceed:
 - Average dead load for roofs and exterior walls, floors and partitions - 15 psf
 - Live loads - 40 psf
 - Ground snow - 50 psf
- Wind speed is not to exceed 100 mph (3-second gust), except that in Exposure Category A or B the wind speed may not exceed 110 mph (Exposure Categories are defined at 1609.4 - C = urban or suburban, D = open terrain with scattered obstructions, and D = flat exposed areas)
- Roof trusses and rafters - 40 feet between points of vertical support
- Not permitted in Seismic Design Category B, C, D, E or F for Seismic Use Group III

at a glance

- ☐ The IRC and IBC codes allow for buildings to be built based on specific rules.
- ☐ The use of trusses fit right into these prescriptive requirements.
- ☐ It is important to have an understanding of the prescriptive requirements so that one knows when the load paths become complex enough that a more detailed look at the flow of loads to the foundation is needed.

- Limited in irregular structures in Seismic Design Category D or E

There are no specific limitations to the types of buildings or to shape and size. The truss and rafter span restriction does not limit structure size, only member span between points of support. In other words, a building could have a 120-foot truss and bearing points every 40 feet and still fall within the IBC prescriptive code.

The limitations relate to structures as a whole. These limitations of the IRC or IBC 2308 are confined to their respective prescriptive requirements. IRC R301.1.3 allows for the engineered design of a portion of the structure or structural element that exceeds the stated limitations. The portion of the structure or structural element that exceeds the stated limitations must be designed considering a complete load path capable of transferring all loads from their point of origin through the load-resisting elements to the foundation (R301.1). All or portions of a structure may be designed to the non-prescriptive sections of the IBC.

The structural building components industry operates in a number of different modes in its relationships with its customers regarding truss design:

- Building Designer/Builder/Owner submits a full set of construction documents and loading criteria to truss manufacturer.
- The truss manufacturer receives a roof or floor layout along with minimum loading criteria.
- The truss manufacturer builds stock trusses or receives an order for trusses where there are no construction documents and the code minimum required loading criteria are applied.

In many cases, the truss manufacturer, truss designer or truss engineer does not have access to building's complete structural framing information. They must rely on the accurate representation by the Building Designer/Builder/Owner that all load path considerations have been addressed and that the code requirements and loads to be applied to trusses as individual planar components are clearly defined.

The IBC and IRC building codes, in concert with ANSI/TPI 1-2002 Chapter 2, provide guidelines regarding the various building construction design and framing responsibilities.

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Familiarity with prescriptive requirements of the code defines quite clearly when the load paths become complex enough that a more detailed look at the flow of loads to the foundation is needed. Good design information and communication enables each member of the construction team to effectively and efficiently build the structure. **SBC**

For more information about how to get involved in the code process, contact WTCA staff at 608/274-4849 or codes@woodtruss.com.

TRUSS LOAD GUIDE (TLG): Guide to Good Practice for Specifying & Applying Loads to Metal Plate Connected Wood Trusses *is coming soon! Be sure to what the WTCA web site (www.woodtruss.com) for more information.*



While Whole House Design continues to be one of the industry's hottest topics, consensus among component manufacturers about the future of the issue remains at arm's length. Join the ongoing discussion.

Component Manufacturers Divided on Whole House Design

by Libby Walters

There is a good reason "whole house design" and its notorious acronym WHD have become industry buzzwords. The concept continues to inspire debates among component manufacturers, signaling the potential for a monumental change in the way we conduct business. For those who are unfamiliar to the concept, here is the one-minute summary of the issues at hand:

- Builders absolutely want to turn the land they develop as quickly as they can. This provides them with a greater return on dollars they invest. Accordingly efficiently designing and framing of the houses they build and sell becomes an important aspect of their business strategy. The challenge to design and frame quickly and thus efficiently, ultimately leads to increased pressure on suppliers with respect to building design, material supply and installation.
- The WHD debate revolves around integrating our industry's truss and structural element design work into the building design process. For component manufacturers, the challenge is predicting the impact and inter-relationships with their traditional role: component design, component manufacturing and delivery to the jobsite.

Due to this issue's uncertain path, complexity, changes to the usual distribution channels, and potential to significantly modify a component manufacturer's current business model, it's little wonder that WHD presents a host of concerns for our industry.

- The current industry business models are a highly fragmented combination of the following: independent component manufacturers, lumber dealers, truss designers, building designers, framers and installers, and builder developers.
- WHD could very well facilitate an evolution of the traditional model to one that is more streamlined and involving greater coordination among component manufacturers, truss designers, building designers, and framers.
- Because the best predictor of how an industry will evolve is economics, the driver of this change will be what business structure or combination will provide the best and most economical structural framing solution.
- In the market today, there is also a continual push to eliminate steps in the distribution process or to consolidate to improve profitability. Therefore, it is likely that a good percentage of construction will eventually integrate component design with building design.
- One solution might be for component manufacturers/suppliers, truss designers, building designers, and framing crews to create strongly or loosely formed alliances, joint ventures or single companies to work collectively, thereby providing a "one-stop shop" for the builder owner/developer.
- CMs have vastly different ways of bringing their products and services to market. Some choose to deliver a product with virtually no engineering behind it; instead they have mastered production and made that process as efficient and cost-effective as possible. Others choose to focus on providing added value through design and engineering, and hopefully through these efforts they add

margin to the sales they make.

- It is reasonable to predict that the CMs that are already offering highly engineered products are the ones most likely to transition into providing whole building design services. Companies currently focusing on engineering and design are better poised to leverage off of the current level of design service they are undertaking, have most likely learned how to derive compensation or better margin for the product line or level of service they are providing, and are apt to transition more quickly than those component manufacturers who are more focused on the manufacturing and/or distribution sides of their businesses.

Due to this issue's uncertain path, complexity, changes to the usual distribution channels, and potential to significantly modify a component manufacturer's current business model, it's little wonder that WHD presents a host of concerns for our industry. Change is never easy even when one knows exactly what to do and in this case there is no exact right path to take, so to continue to provide a discussion forum, we'll hear from component manufacturers on how they feel about the potential WHD paradigm shift.

At a February joint chapter meeting in Chattanooga, TN, members of four chapters (ACMA, GCMA, TTMA, and WTCA KY) representing Alabama, Georgia, Tennessee and Kentucky voiced their hopes, fears and predictions for the future of WHD and the industry.

Tom Butler of McGuffin Truss & Components, Inc. remembered controversy over WHD in the fall of 2004. "At BCMC 2004 in Charlotte, there was a roundtable discussion on WHD.

It got heated: there were strong opinions for and against it. Some manufacturers want to change their business models to include that value-added proposition; others aren't interested," he said. He was skeptical that a clear-cut consensus among CMs on the issue would ever be reached: "Can we really say as an industry that we are all headed in the same direction?"

Johan von Tilburg of Tindell's, Inc. said from his perspective, the trend toward whole building design is unavoidable. "It's inevitable. All the big builders want to focus on land development; they don't want to build. Eventually [component

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Support Docs

For a graphical representation and more detail regarding these concepts, please go to the "Past Issues" section of *SBC Magazine* at www.sbcmag.info and read the August 2004 and September/October 2004 articles entitled "The Next Generation of Structural Building Components Design (Part 1 of 2)" and "The Next Generation of Structural Building Components Design (Part 2 of 2)," respectively.

manufacturers] will be designing the whole structure."

Kirk Grundahl, WTCA Executive Director, agreed that builders are in the "turn-the-land-as-fast-as-one-can" business and everything else associated with land development is a necessary evil. He said, "The key question to ask is how can CMs derive and provide the most value to their builder customers, given the builder's desire to rapidly develop land.

Where do CMs all fit into that process and how do we provide the best economic framing solution in the future?"

Mike Cobb of Bluegrass Truss shared their experience with the local builders' alleged trend toward turnkey framing and how this might speak to the issue of WHD. "There was a huge turnkey push in our [Lexington, KY] market three years ago. We thought for certain we'd soon have to embrace turnkey as well, but thank goodness we didn't because that push is over

now," he said. It seems as though the market was not mature enough to have turned to that model. Mike noted that in the end, communication seemed to be the impediment to making the turnkey process work in their market.

Another attendee commented on the turnkey framing issue, "Maybe developers want to be completely turnkey. Maybe they're looking for a one-stop shop because they don't want to get their hands dirty. If that's the case, the question for CMs is 'how can we partner with the right people in the distribution channel to provide that whole package?'"

Continued on page 48

at a glance

- ☐ Whole house design continues to be the talk of our industry. What does it mean to your business?
- ☐ Today's builders are actually land developers; the sooner they are done developing the sooner they get a return on their investment.
- ☐ Builders are increasingly asking for turnkey solutions to their primary land development problem: housing.

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The key question to ask is how can CMs derive and provide the most value to their builder customers, given the builder's desire to rapidly develop land. Where do CMs all fit into that process and how do we provide the best economic framing solution in the future?

CMs Divided on Whole House Design

Continued from page 45

Tom Butler brought the issue of unique market drivers into the debate. "I think it's a model of niches. The industry won't see an across-the-board change in the direction toward or away from WHD. The reality is that it's much more complicated than that," he said.

WTCA Board member and Education & Technology (E&T) chair Clyde Bartlett addressed the concept of WHD from the broadest of views: the best interest of the industry as a whole. "One of the things that makes this issue so challenging for WTCA as a national organization is that we represent big and small companies. The trend toward WHD inevitably works to the advantage of the larger integrated companies and can hurt small company business and business strategies," he said with a tone of sincerity. "It's our job [as WTCA board members] to consider all the implications involved."

Johan disagreed with Clyde's analysis of who would be more successful with the WHD model. "I think small companies

have a huge advantage in turning to a WHD business model because we can launch WHD services in a matter of a month, where a larger company can't make the change that quickly," he commented.

Kirk mentioned, "The best question for us to ask is how to derive the optimum value for your customer. One answer may be: I'm going to be a framer, a component manufacturer and a designer. Then you have a value proposition that can more easily embrace and implement optimum value engineering." He added, "The key is to perceive what the market around you wants and find the niche(s) that you would like to fill better than anyone else. It is not a zero sum game."

While the future of WHD's impact on the industry is ambiguous, one message is clear: keep your eye on the ball. Those who don't pay attention may find themselves wondering what happened to them as the dust clears from this epic industry evolution. **SBC**

Are you ready to weigh in on this important issue? Send your comments to lwalters@sbcsmg.info or call 608/310-6724.

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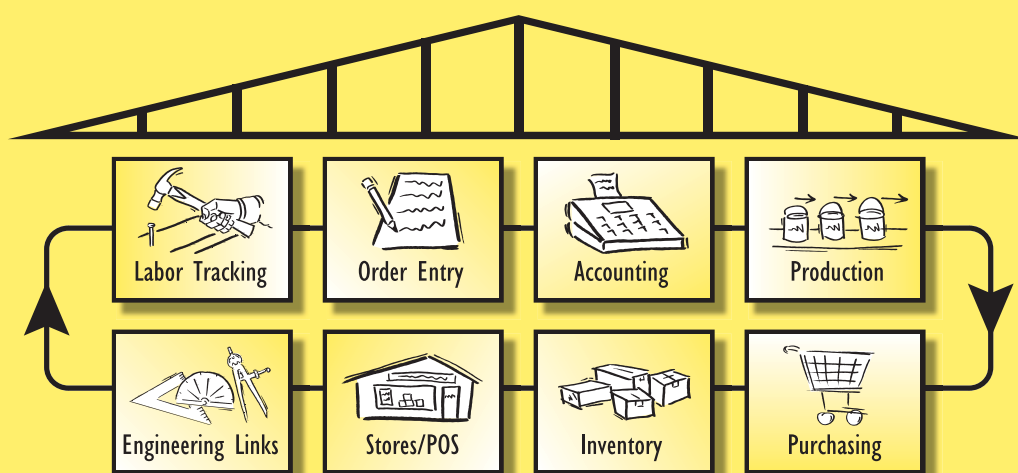
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2005 National Design Specification® (NDS®) for Wood Construction

by Phil Line, P.E.; John "Buddy" Showalter, P.E.; and Robert J. Taylor, Ph.D., PEng.

The primary change in the 2005 NDS is the introduction of load and resistance factor design (LRFD). Learn more about the format changes that were necessary to accommodate the addition of LRFD.

The 2005 Edition of the *National Design Specification for Wood Construction* has been approved as an American National Standard, with a designation *ANSI/AF&PA NDS-2005*. The 2005 NDS was developed as a dual format specification incorporating design provisions for both allowable stress design (ASD) and load and resistance factor design (LRFD). AF&PA's Wood Design Standards Committee (WDSC) guided it through the consensus process over the course of 2-1/2 years. The primary change in the 2005 NDS is the introduction of LRFD methods to the Specification.

Several format changes to the NDS to accommodate addition of LRFD are summarized in this article and include:

- Revised terminology,
- Expanded applicability of adjustment factor tables,
- Re-format of radial tension design values,
- Revised format of beam and column stability provisions (addition of E_{min} property), and
- Addition of NDS Appendix N – Load and Resistance Factor Design.

A number of other changes introduced in the 2005 Edition include:

- Removal of form factor,
- Revision of repetitive member factor for I-joists,
- Revision of full-design value terminology, and
- Clarification of built-up column provisions.

The *NDS Supplement, Design Values for Wood Construction* has also been updated to provide the latest design values for sawn lumber and glued laminated timber. What follows are the updates most likely to affect those undertaking wood member design in the wood truss industry.

Introducing LRFD to NDS – An Overview

Over the years, the WDSC identified benefits of developing a dual format specification which would include: addressing user needs for consistent design information regardless of design format (ASD or LRFD); better utilizing standards committee resources; and providing current design information for the academic community. The 2005 NDS maintains the current 2001 NDS format, familiar to most wood designers. As a result, NDS 2005 is very similar to the 2001 NDS for ASD design, with few exceptions.

Users familiar with the NDS ASD provisions will also find transition to LRFD straightforward. Behavioral equations, such as those for member and connection design, are the same for both ASD and LRFD. Adjustment factor tables now include applicable factors for determining an adjusted ASD design value or an adjusted LRFD design value. A new *Appendix N - Mandatory Appendix for Load and Resistance Factor Design (LRFD)* outlines requirements that are unique to LRFD and adjustment factors for LRFD.

Terminology:

Basic requirements for checking strength are revised to use terminology applicable to both ASD and LRFD. For example, the basic requirement for strength in bending is revised as follows:

"3.3.1 The actual bending stress or moment shall not exceed the adjusted allowable bending design value."

In equation format, this takes the standard form $f_b \leq F_b'$. The term "allowable," typically associated with ASD, is replaced by "adjusted" to be more generally applicable to either ASD or LRFD and to better describe the approach of applying adjustment factors to reference design values. Reference design values (F_b , F_t , F_v , F_c , $F_{c\perp}$, E , E_{min}) are multiplied by adjustment factors to determine adjusted design values (F_b' , F_t' , F_v' , F_c' , $F_{c\perp}'$, E' , E_{min}').

Applicability of Adjustment Factor Tables:

For member design, the adjusted bending design value, F_b' , of a sawn lumber bending member is determined using Table 4.3.1 (see page 52) as follows:

For ASD:

$$F_b' = F_b C_D C_M C_t C_L C_F C_{fu} C_i C_r$$

For LRFD:

$$F_b' = F_b K_F \phi_b \lambda C_M C_t C_L C_F C_{fu} C_i C_r$$

where:

F_b = the reference bending design value based on normal load duration.

For connection design, the adjusted lateral design value, Z' , of a dowel connection (i.e., nail, bolt, etc.) is determined using Table 10.3.1 *Applicability of Adjustment Factors for Connections* as follows:

For ASD:

$$Z' = Z C_D C_M C_t C_g C_{\Delta} C_{eg} C_{di} C_{tn}$$

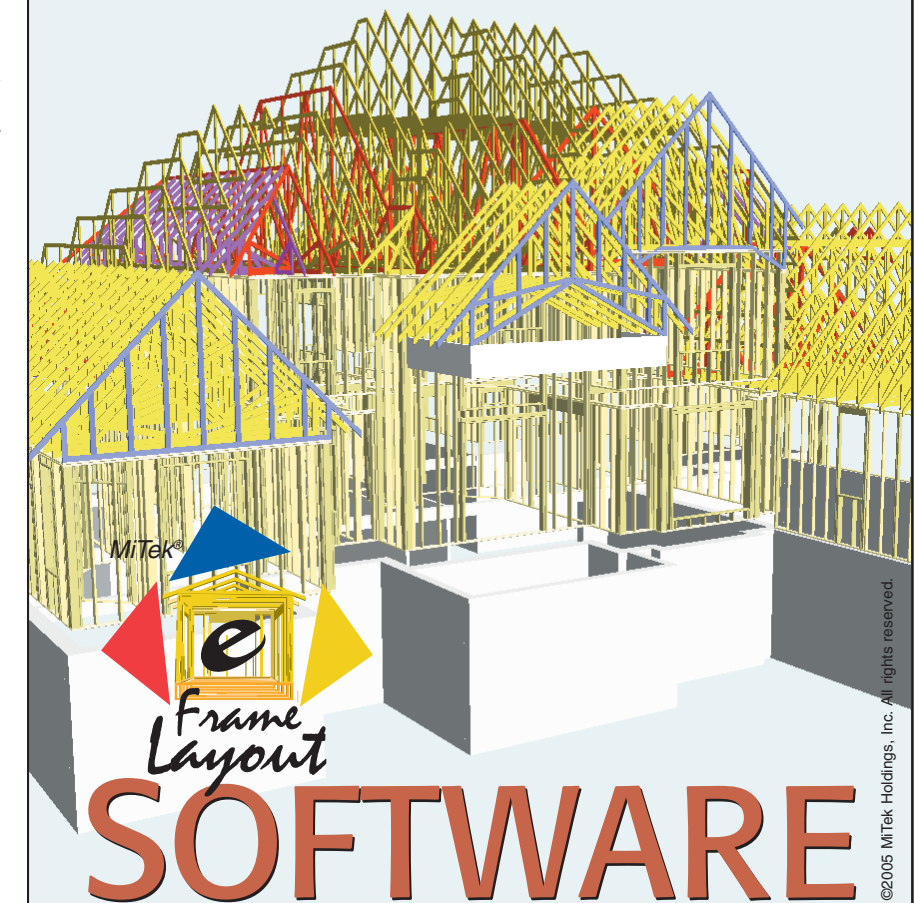
For LRFD:

$$Z' = Z K_F \phi \lambda C_M C_t C_g C_{\Delta} C_{eg} C_{di} C_{tn}$$

where:

Z = the reference design value based on normal load duration. Z may be taken from connection tables directly or calculated using yield mode equations.

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For ASD member and connection design, this approach is identical to that used in prior editions of the NDS. For LRFD member and connection design, adjustment factors applicable to reference design values, make conversion between ASD and LRFD-based design values transparent.

In the 2005 NDS, "reference design value" designates the allowable stress design value based on normal load duration and replaces terms such as *tabulated*, *nominal*, *base*, and *published*, which were also based on normal load duration. The variety of terms was considered potentially confusing. For example, tabulated and published values outside of the Specification may already include adjustment factors.

Continued on page 52

at a glance

- Wood allowable stress design, used extensively by the truss industry, does not change significantly in the 2005 NDS.
- One of the key features of the 2005 NDS is the work done to make the NDS more consistent in terminology and clarify sections that have been known to be confusing in the past.
- The 2005 NDS has very minimal impact on allowable stress design and has the added benefit of having a transparent approach to learning and using load and resistance factor design.

Table 4.3.1 Applicability of Adjustment Factors for Sawn Lumber

		ASD only	ASD and LRFD										LRFD only		
		Load Duration Factor	Wet Service Factor	Temperature Factor	Beam Stability Factor	Size Factor	Flat Use Factor	Incising Factor	Repetitive Member Factor	Column Stability Factor	Buckling Stiffness Factor	Bearing Area Factor	Format Conversion Factor	Resistance Factor	Time Effect Factor
$F_b' = F_b$	x	C_D	C_M	C_t	C_L	C_F	C_{fu}	C_i	C_r	-	-	-	K_F	ϕ_b	λ
$F_t' = F_t$	x	C_D	C_M	C_t	-	C_F	-	C_i	-	-	-	-	K_F	ϕ_t	λ
$F_v' = F_v$	x	C_D	C_M	C_t	-	-	-	C_i	-	-	-	-	K_F	ϕ_v	λ
$F_{cL}' = F_{cL}$	x	-	C_M	C_t	-	-	-	C_i	-	-	-	C_b	K_F	ϕ_c	λ
$F_c' = F_c$	x	C_D	C_M	C_t	-	C_F	-	C_i	-	C_P	-	-	K_F	ϕ_c	λ
$E' = E$	x	-	C_M	C_t	-	-	-	C_i	-	-	C_T	-	-	-	-
$E_{min}' = E_{min}$	x	-	C_M	C_t	-	-	-	C_i	-	-	C_T	-	K_F	ϕ_s	-

2005 National Design Specification®...

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Nominal may be interpreted as nominal strength (especially with the addition of LRFD) rather than in current *NDS* use where it means unadjusted. To avoid confusion, the descriptor “reference” is used and serves as a reminder that design value adjustment factors are applicable for design values in accordance with referenced conditions specified in the *NDS*—such as normal load duration.

Revised Format of NDS Beam and Column Stability Provisions:

The *2005 NDS* includes a revised format for column and beam behavioral equations to address both ASD and LRFD:

NDS 2005 3.3.3.8:

3.3.3.8 The beam stability factor shall be calculated as follows:

$$C_L = \frac{1 + (F_{bE}/F_b^*)}{1.9} - \sqrt{\left[\frac{1 + (F_{bE}/F_b^*)}{1.9} \right]^2 - \frac{F_{bE}/F_b^*}{0.95}} \quad (3.3-6)$$

where:

F_b^* = reference bending design value multiplied by all applicable adjustment factors except C_{fu} , C_V , and C_L (see 2.3) and

$$F_{bE} = 1.20E_{min}' / R_b^2.$$

The value $F_{bE} = 1.20E_{min}' / R_b^2$ is algebraically equivalent to and replaces $F_{bE} = K_{bE} E' / R_b^2$ used in the *2001 NDS*. Because the design equation for K_{bE} includes a reduction for safety, two different formats of the *2001 NDS* equation would

be needed to address both ASD and LRFD.

Instead, the *2005 NDS* utilizes E_{min}' , which is adjusted for safety, so the safety factor is not part of the basic design equation. Applicable adjustments to E_{min}' , based on applicability of adjustment factor tables are used to establish the appropriate adjusted modulus of elasticity for beam and column stability, E_{min}' for either ASD or LRFD.

NDS 2005 3.7.1.5:

3.7.1.5 The column stability factor shall be calculated as follows:

$$C_P = \frac{1 + (F_{cE}/F_c^*)}{2c} - \sqrt{\left[\frac{1 + (F_{cE}/F_c^*)}{2c} \right]^2 - \frac{F_{cE}/F_c^*}{c}} \quad (3.7-1)$$

where:

F_c^* = reference compression design value parallel to grain multiplied by all applicable adjustment factors except C_P (see 2.3) and

$$F_{cE} = 0.822E_{min}' / (l_e/d)^2.$$

The value $F_{cE} = 0.822E_{min}' / (l_e/d)^2$ is algebraically equivalent to and replaces $F_{cE} = K_{cE} E' / (l_e/d)^2$ used in the *2001 NDS*. The background justification for this change is identical to that for the beam equation in 3.3.3.8.

Modulus of Elasticity for Beam and Column Stability, E_{min}' :

For sawn lumber and glulam, reference modulus of elasticity for beam and column stability, E_{min} (which represents an approximate 5 percent lower exclusion value on pure bending modulus of elasticity, divided by a 1.66 factor of safety),

Continued on page 54



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2005 National Design Specification®...

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is tabulated in the NDS Supplement. However, it can also be calculated as follows:

$$E_{\min} = 1.03E (1 - 1.645(\text{COV}_E)) / 1.66$$

where:

E = reference modulus of elasticity,

1.03 = adjustment factor to convert E to a pure bending basis except that the factor is 1.05 for glued laminated timber,

1.66 = factor of safety, and

COV_E = coefficient of variation in modulus of elasticity (see NDS Appendix F).

Repetitive Member Factor for I-joists:

Revision to the NDS 2005 repetitive member factor, C_r , for I-joists corresponds to revisions in ASTM D5055-02 setting the factor equal to 1.0:

7.3.6 Repetitive Member Factor, C_r

For prefabricated wood I-joists with structural com-

posite lumber flanges or sawn lumber flanges, adjusted moment design resistances shall be multiplied by the repetitive member factor, $C_r = 1.0$

In lieu of complete removal of the C_r factor for I-joists in the 2005 NDS, the repetitive member factor was set to 1.0 for clarity since past practice has permitted other C_r factors. For example, in the 2001 NDS, $C_r = 1.04$, for I-joists with structural composite lumber flanges and $C_r = 1.07$, for I-joists with sawn lumber flanges.

Revised "Full-Design Value" Terminology and Added Reference to Provisions for Checking Wood Stresses:

Phrases such as "minimum spacing for full design value" and "minimum end distance for full design value" are replaced with alternate descriptions since other provisions for evaluating wood strength must also be checked to ensure that the "full-design

value" can be developed. Multiple references to section 10.1.2 are added as a reminder to check wood strength at connections. Example revisions follow:

10.2.2 Multiple Fastener Connections

When a connection contains two or more fasteners of the same type and similar size, each of which exhibits the same yield mode (see Appendix I), the total adjusted design value for the connection shall be the sum of the adjusted design values for each individual fastener. Local stresses in connections using multiple fasteners shall be checked in accordance with principles of engineering mechanics (see 10.1.2).

11.1.2.4 Edge distance, end distance, and fastener spacing required to develop full design values shall not be less than the requirements in accordance with Table 11.5.1A-D.

These revisions do not change methods for calculating strength of connections, but remove language that is potentially confusing. For example, there are additional requirements for checking wood strength at connections based on principles of engineering mechanics and procedures outlined in Appendix E for evaluating member strength around fastener groups.

Clarify 15.3.2.2 Built-Up Column Design:

Built-up column provisions were revised to correct an obvious but unintended limitation on short built-up columns.

15.3.2.2.... E_c' for built-up columns need not be less than E_c' for the individual laminations designed as individual solid columns per section 3.7.

This change permits individual laminations in a built-up column to be designed using provisions of section 3.7 for solid columns. With this change, built-up columns are not unnecessarily limited to design capacities less than the sum of individual member capacities.

Additional Design Tools

The revised NDS will be packaged with additional publications as follows:

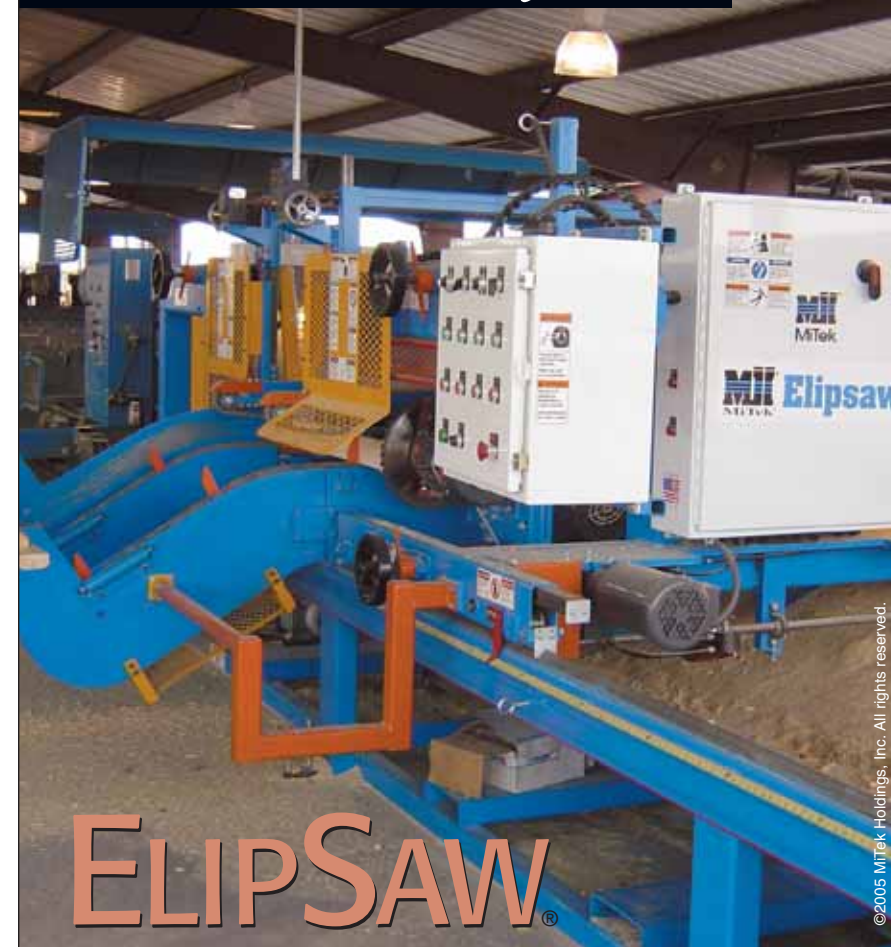
- ANSI/AF&PA NDS-2005 with Commentary,
- NDS Supplement – Design Values for Wood Construction, 2005 Edition,
- ANSI/AF&PA SDPWS-05 Supplement – Special Design Provisions for Wind and Seismic (SDPWS) with Commentary, and
- ASD/LRFD Manual for Engineered Wood Construction, 2005 Edition.

The 2005 Wood Design Package will be available later this year through WTCA Publications. Visit www.woodtruss.com/pubs to place your order online.

Conclusion

The primary change in the 2005 NDS is the introduction of LRFD methods to the Specification. Several format changes to the NDS to accommodate

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the addition of LRFD have been summarized. Users will find very minimal impact on the ASD process as a result, with the added benefit of having a transparent approach to learn and use LRFD. An integrated commentary and other design tools will be available for the new standard. **SBC**

The authors are all on staff at AF&PA's American Wood Council. Phil Line, P.E., is Senior Manager of Engineering Research, John "Buddy" Showalter, P.E., is Director of Technical Media, and Robert J. Taylor, Ph.D., PEng. is Director of Technology Transfer.



Surviving Idaho

by Libby Walters

In a market where differentiation is crucial for survival, Idaho Truss & Component Company has embraced whole house design.

Boise, Idaho: October 2004. There are a few things you should know before setting foot in this state. 1) Boise is pronounced "boy-see." You will be corrected if you dare mispronounce it. 2) Don't ask the locals to point you in the direction of a good potato. Try a different tuber; there are no potatoes in Idaho.

Got space issues at your truss plant? Longing to get paid fairly for all—not just some—of the work you do? Is your tight market getting even tighter? Pull up a chair and let the Idaho Truss & Component Company (IT&C) staff tell you a little story about their experience with these issues amidst the growth in the Treasure Valley housing market.

Kendall Hoyd, current WTCA President and President of IT&C in Meridian, a small but growing town ten miles west of Boise (see above for pronunciation), is deliberate and direct. Since 1997, being cautious but not risk averse is most likely how he and partner Mike Hill have built a solid foundation upon which IT&C has flourished in light of the typical challenges of running a component manufacturing operation.

IT&C has a large and growing presence in the Treasure Valley residential and commercial building market. But then again, so do about a dozen other component manufacturers, making the local market very competitive. However, that wasn't always the case. In just the last ten years, the number of truss companies in the Treasure Valley market has doubled, according to Kendall. New housing developments in suburban Boise have virtually sprouted in communities like Meridian, Eagle, Nampa, Caldwell, Cascade and McCall.

It's little wonder residential construction in and around Treasure Valley has heated up in the past decade. The terrain, with the mountains of the Boise Front rising through the clouds, is at the very least picturesque. What used to attract tourists to spend their vacations now calls them to build permanent residences. As a result, the Treasure Valley residential building market has trended to primarily custom homes.

Turf War

There's a bloody turf (literally speaking) war going on at IT&C, and battles rage daily between internal factions fighting for a few more square yards of real estate. As IT&C has continued to grow, coming up with extra space for more bodies, raw materials and finished goods storage continues to be an issue. Sitting on just over four acres, IT&C cranks out more than \$13 million a year spread between EWP sales and distribution, a lumber yard, roof and floor truss production, wall panel production, and the occasional light gauge steel truss job. Needless to say, they've had no choice but to get creative with those four acres.

With the prospect of relocating at least a few years off, contending with the current lack of space involves strategic planning on a daily basis, Mike said. In fact, nearly every decision made with respect to the production operation has been

Continued on page 58

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at a glance

- ❑ Four acres and a cloud of dust is an apt description of Idaho Truss.
- ❑ Some component manufacturers choose to embrace and not resist the whole building design concept.
- ❑ One major key to success with respect to whole building design is being compensated for building design and engineering work.

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Surviving Idaho

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made with the shortage of ground and storage space in mind. "One of the things that we've had to do is significantly reduce lumber grade and species. It's just one of many solutions we've implemented to reduce our need for storage space," Mike noted.

La Pièce de Resistance: Whole House Design

If you get to know Kendall, you'll find that one of his pet peeves is when IT&C salesmen or designers go to work on bad plans without pricing components accordingly. "It is an Idaho Truss tradition to accommodate bad plans by fixing them. Ultimately, we are feeding the problem, not fixing it," Kendall stated. You'll hear him say it over and over: "We ought to be getting paid for that work." It's a value-added proposition that makes sense for component manufacturers to consider, especially in a market where differentiation is crucial to survival.

Hence the need for an in-house engineering firm such as Performance Engineers, and a plan service such as Reality Design. The concept is simple: Performance Engineers and Reality Design feed the system good information from the

beginning of the construction process, saving the builder time and money in the end as well as helping the truss and wall design and manufacturing team more easily do what they do best. If this concept seems a lot like whole house design, you've hit the bull's eye.

IT&C manager Dave Moorhouse is on a mission to educate the builder about these issues and develop a lasting relationship with that builder. "I want to work with builders who understand the Idaho Truss value proposition," he noted. Repeat after me: *There's no reason we shouldn't expect to be compensated for our building design and engineering work.*

Part of IT&C's growth was the addition of a wall panel division in 2002. Wall panel design and manufacturing may be an entirely different animal than roof and

floor trusses, but the theme of inadequate plans remains the same. Wall panel designer Curtis Elordi said, "It is unbelievable how much better our plans are than those that we receive from some other sources. (If you've ever designed components from a plan purchased off of the Internet, you know what this means.)" "Part of the problem involves price," he said. "Some building designers create the minimum design in the plan to get the building permit and rely on the wall and truss designers to do the rest, which cuts to the core of why Idaho Truss got into that side of the business in the first place."

All together now: *We ought to be getting paid for this extra work.* Because Building Officials are tightening up their plan review process in many cases, IT&C customers are aptly prepared for it because of their design services.

Surviving in a Tight Market: Keys to Success

As with many markets across the country, the Boise or Treasure Valley market is quite competitive. The IT&C staff's stepped-up employee training has, in Kendall's humble opinion, contributed to IT&C's increased credibility in the marketplace, which helps in a highly competitive market. And taking advantage of various training programs developed

specifically for component manufacturers by WTCA has played a major role. "Becoming certified in the **In-Plant WTCA QC** program (February 2001) has proven to elevate overall product quality," Kendall said, "and it has also worked to enhance the culture of quality in the plant by heightening the staff's attention to product details at all times. Since management prefers promoting from within the company when they can, they developed an internal recruitment program in which production staff who have taken and passed the Technical Assessment Test Online (TATO), and WTCA's Truss Technician Training (TTT) Level I Online (and met other criteria) are given the opportunity to join the design staff when there is an opening. In addition to providing an incentive to employees to sharpen their skills and move up in the company, TTT certification has helped Idaho Truss weather an increasingly competitive market.

"Our Own Little Idaho"

At the end of the day, these issues and many, many others come with the territory of running a business in this industry. It's how you deal with them that defines the customers' satisfaction with the product and your service, your reputation in the market, and the ultimate success or failure of the company.

The Bodeans wrote a sweet little rock song called "Idaho," whose lyrics remind us that there's a piece of Idaho Truss in each of our operations, no matter who we are, how long we've been at it, or where we're situated in this world:

*There's another busted dream,
Staring at me right in the face,
Good lord knows why we don't give in,
Try to leave, maybe run from this place*

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*Staring at the world, from our own little Idaho
Staring at the world, from our own little Idaho. SBC*





A Practical Skill to Pay the Bills (Part 3 of 3)

by Libby Walters

Meet a few of the inmates at Marion Correctional Institution and find out how the Stark Marion program is providing the right opportunity for a fresh start.

In the previous two installments of this series, we looked at the concept of recidivism in the United States and the outside factors most likely to encourage an ex-felon to re-offend. We stepped into the lives of several former inmates, currently employed by two WTCA member companies—Stark Truss Company (Tony, Todd and Mike) and Bluegrass Truss Company (Mike, Larry, Jonathon, Sonny and Greg)—and learned of the mistakes that landed them behind bars. We also learned how employment with these companies helped them beat the recidivism odds. Approximately seven out of every ten felons re-offend and are sent back to prison within three years of their original release, proof that re-integration is a major hurdle for any felon.

In this final installment, we'll explore life within the confines of Marion Correctional Institution (MCI), the facility that has housed Stark Truss's inmate technician program since 1996. As stated in Part 2, the Stark Marion program is known among inmates at MCI as elitist. To say that positions vacated by an inmate who has been released or transferred to a different training program within MCI are coveted is a gross understatement. One reason for this desire to work for the program, as the inmates revealed, is to break up the monotony of reliving the same day over and over again. Another reason for the program's popularity is the promise of a chance to start anew after years in prison. During our interview, Damon articulated a simple but prophetic/perceptive rhyme that has stuck with me since the blustery day in January that I visited MCI: "a practical skill to pay the bill."

Inside MCI

Arriving at Stark Marion, we were met with a highly charged group of men sitting in front of computers, discussing details about this job and that, and a homecoming of sorts. Tony made the trip back to MCI to visit with some of his former prisonmates, a bittersweet time for all who were reunited, knowing he would leave on his own free will.

In concert with Ohio Penal Industries (OPI), Stark Marion employs about a dozen inmates, providing the necessary training and materials to bring the inmates up to speed on truss design. Longtime Stark employee Dave Berrong is now Stark Marion's official fearless leader, training and overseeing the inmates' work. Berrong has worn many hats since joining the Stark family in 1983. From five years in the shop as truss builder and sawyer to truss technician gradually learning blueprint takeoff and truss layout, to his current position as Technical Manager: Commercial/Multi-family Division. In addition to his duties overseeing the program at Marion, Berrong lays out large commercial projects for jobs all over the country.

We sat down with five of the men working at Stark Marion to discuss how the program has helped them and their plans for the future. In many respects, the Stark Marion technicians have formed a brotherhood by virtue of the experiences they've shared while learning truss design and making the most out of each day at MCI. Rick Idle is one of the founding members of Stark Marion (he and others were the

Continued on page 62

Who's Who:

Former MCI inmate/Stark Marion technician:

Tony
Mike
Todd

Current MCI inmate/Stark Marion technician:

Pete
Tim
Squire
Damon
Rick (founding member of Stark Marion design dept.)

Manager of Stark's Sherman, TX location:

Rich Ackley

Manager of Stark's Hearne, TX location:

Tim Willet

Vice President of Stark Truss:

Don Groom

Founder & President of Stark Truss Company:

Abner Yoder

Marion Correctional Institute Warden:

Christine Money

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- Low profile product can be sheathed over when used as erection bracing.
- Eliminates the need to remove bracing prior to sheathing.
- Patent pending.

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The Road to Re-entry...

Continued from page 60

first to enter the program in 1996), and is the crew's sage jack of all trades. Rick installs all design software updates, knows floor, wall panel, roof and steel truss design, and just about anything else you'd care to know about component design. According to Rick, the Stark Marion group has one thing other Stark design departments don't: "Our advantage is the time we have to read the software manuals and study. We take the reading material back to our cells at night," he said. His drive and motivation to master truss design is evident.

Squire quotes jobs for the Ohio plants; he has worked at Stark Marion for almost seven years. Pete double-checks work before a job is faxed or emailed out of MCI and routes incoming calls or email/fax correspondence from the guards to the right inmate. He's worked in the department for five years. Damon designs commercial and multi-family projects for the two Texas plants, and has worked at Stark Marion for about five years. "It's very challenging. I truly enjoy the work because it keeps me busy!" he said. Tim is very new to the program, having joined the group less than a year ago.

Commercial and multi-family design work is sent to Stark Marion via Stark plants in Sherman and Hearne, TX, managed by Rich Ackley and Tim Willet respectively. They truly function as a team, despite the near 1,200 miles that separate them. Rich Ackley emphasized the staff's amazing work ethic. "They give 100 percent at all times. They have an incredible passion. There is a fine line between us and them. They have been judged and served their time, and I believe they deserve a second chance in this life." He praised the department for their diligence, "I can totally count on them to get the job done. As the manager of a location, I have a peace that they won't be distracted by phone or email; they are there to serve us. That's one thing I can say with pride: they certainly serve passionately," he said.



Rick



Damon



Tim



Squire



Pete

Sam Steward and Rich Ackley have been touched on a personal level through their close work with the Marion technicians. At Tony's wedding reception, his dad toasted Sam and Stark Truss for giving him his son back, a moment that "was the greatest reward for my work. It made it all worthwhile," Sam recalled.

Rich Ackley recounted a personal story about his relationship with the inmates that changed his mind forever about the importance of the program. "I'll never forget about three years ago when my five-year-old daughter was very sick and had to be hospitalized. When I came back to the office, the Marion [inmates] had made a giant get-well poster for my daughter. Through the word of mouth, they found out and prayed. Their gesture of goodwill made me realize they have hearts like everyone else," he said with gratitude.

Serious about Security

The Stark Marion staff plays by some very strict rules. For instance, inmates are prohibited from making outgoing phone calls or accepting incoming calls without first being screened by MCI guards. Along the same lines, no Internet access is permitted, which means inmates cannot send or receive email from their machines. Any email correspondence must pass through a guard's email account, accessed only from a computer in a gated cell. As reported in Part 2 of this series, although Stark Marion operates as an OPI business, MCI requires a state guard to monitor the inmates' activity at all times. That means no work for Stark Marion on state holidays when guards are off duty. Similarly, the department ceases work in the event of a prison lock-down, and sometimes there isn't time to warn the Texas brotherhood.

In addition to security measures that restrict communication, each day's schedule is strictly regimented. There are twice daily "head counts." All work must cease at 3:00. This schedule, in combination with the restrictions on communication, not only shortens the work day but



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forces the Sherman and Hearne staff to be exceedingly flexible. As stated in Part 2, Rich Ackley commented on jumping the communication hurdles. "I learned rather quickly to be mindful of their timeframe. When you account for lunch, breaks and 'count,' they're working for about 6.5 hours per day," he said. Tim Willet said, "Initially, not being able to get in touch with them when it was convenient for me was frustrating. I just had to learn to work around their schedule and be flexible," he noted.

A Practical Skill

Like many of the inmates we talked to, Damon is thankful for the opportunity to learn a new skill while preparing for life outside of jail. "Anybody could end up in here. One moment in time is all it takes to land you in prison. This program teaches you a practical skill to pay the bill. It's what helps you rebuild your life. When you develop the habits every day, you prepare yourself for the next big game. I take this one day at a time—that's all I can do," he said.

Squire remarked that given his four-year degree in business administration, he never would have expected to be learning a building construction trade. "I had no construction skills when I first started with the program. It was very tough when I started. I had no idea what a 2x4 was," he laughed.

Rick pointed out the inmates' work ethic and motivation is stronger than the public may think. "The guy who works hard in here for practically nothing (free) is going to work even harder when they get out. Many people who are sent

to prison are doctors, lawyers or engineers that have training and skills. And they made one mistake—that's all it takes," he commented quietly. Damon concurred, noting that not everyone in prison is a criminal for life: "You go left when you should have gone right. It's not that you led a life of crime, it was a moment in time when you made a bad decision."

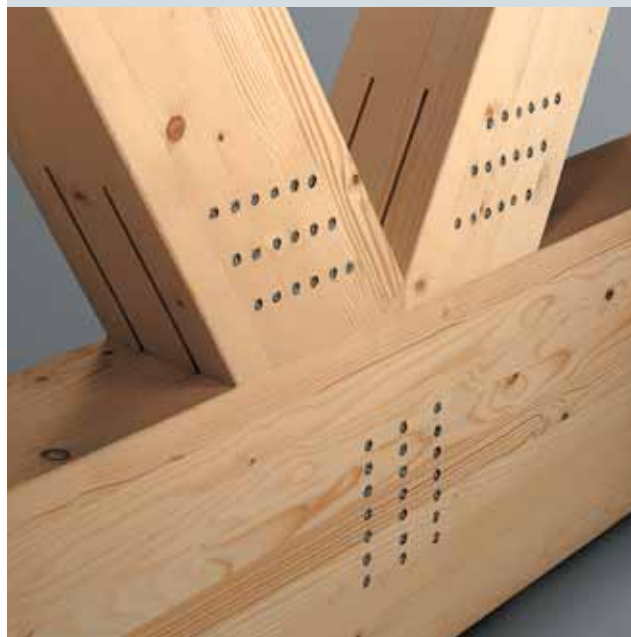
The Promise of Life Beyond Bars

Like the others, Squire's attitude and outlook toward the future is refreshingly upbeat: "You can only get out of this job what you put in. I feel that I've proven my abilities and I hope [Stark] places me when I'm released." He noted, "We know this [job] is a means to an end. It's an 'out' for us to get a job on the street and prove to the world that we can be trusted again." In fact, Squire's recent hearing in front of the parole board returned good news for both him-

self and Stark Truss; he is scheduled to be released during the first week in May. Dave Berrong said, "I am certain that he will become a top notch technician for Stark. He has the ability and the desire to do a great job."

Continued on page 64

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The Road to Re-entry...

Continued from page 63

Both Rich Ackley and Tim Willet spoke about the joy in following from an inmate learning truss design and about the truss industry to a free man employed at Stark Truss. "We've got men who have worked with us for so many years in Marion and then they get out and they are just filled with joy to be out. They have a huge impact on our company," said Rich Ackley. Tim Willet commented, "To see [the inmates] get out and succeed is an amazing experience. They have embraced the opportunity to stay with Stark; that's a hell of a reward."

During the interview, Don Groom spoke sincerely to the inmates: "[Truss design] is a marketable skill that is very desirable in our industry right now. We didn't just want to hire you in prison and leave you hanging when you were released. It was our goal to teach you a skill to use every day." He explained that it takes (on average) about two years of training for each inmate to be able to work self-sufficiently: not much difference than the time it would take to train

someone off the street. Rich Ackley pointed out that the program addresses the chronic shortage of skilled technicians in the industry. "The bottom line is there are never enough skilled technicians in the industry."

Recidivism Remedy: The Big Picture

MCI Warden Christine Money has spent nearly a quarter century working in prisons, and assumed her current position in June 1996. She spoke about the necessity of programs that focus on re-entry and rehabilitation. "The whole country is focusing on re-entry, it seems. The pendulum is swinging because people have begun to realize that [inmates] are getting out of prison. They could be your neighbor at some point. Which would you prefer: someone who has skills, a job and direction, or someone who is aimless?" she asked. She reflected on her experience working closely with Stark Truss: "Participating with Stark has been one of the most creative partnerships I've seen at

MCI. They trust their people, and most importantly, they don't judge. They live out their faith and keep their word about hiring the guys when they get out. They've brought hope to the people who are incarcerated, some of whom have tremendous skill. What Stark is doing is giving them an outlet for that skill." There's little doubt that Stark set out to do just that: live out their faith, keep their word, give hope and provide an outlet for skill.

Conclusion

It is appropriate to end this series with a quote about the driving force and heart behind this program: Abner Yoder. Don Groom summarized the core beliefs of Stark's leader: "...to offer the incarcerated not only a job to occupy their time while in prison, but a chance to prove themselves and learn a valuable skill to apply upon their release. He believed that human beings weren't born to go to prison; they are here for a specific purpose and it was Abner's mission to find their natural ability and talent and then give them a second chance to be successful in this life," said Groom.

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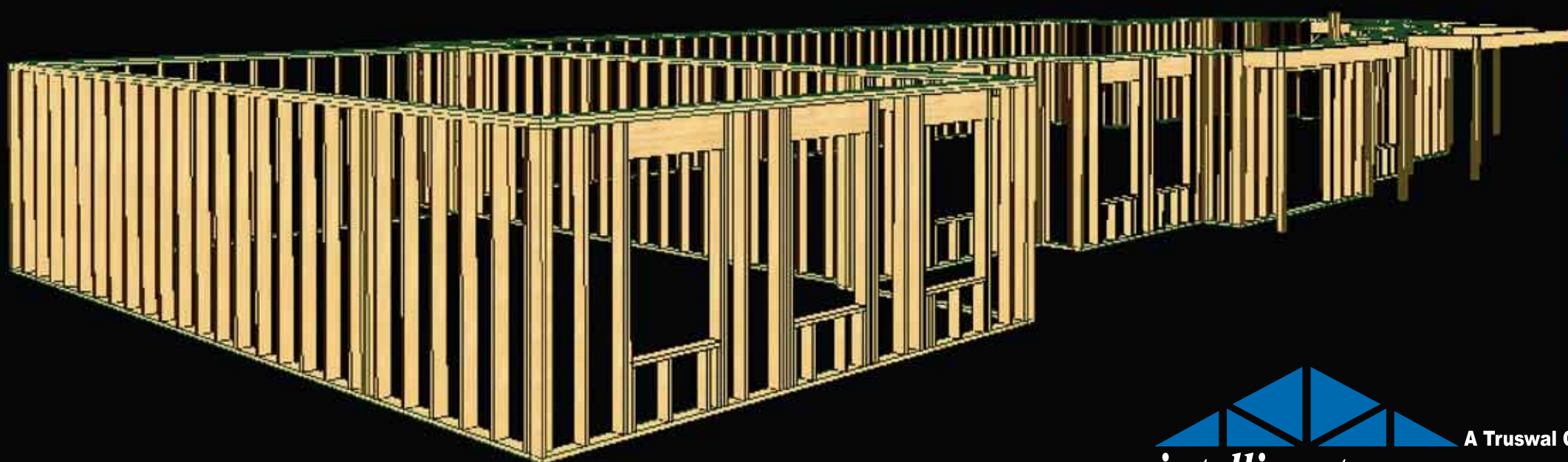
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Brothers Dean and Robbie Rood began their own framing company (R-Squared) in 1995 and caught the wall panel fever in 2001. The challenge was talking to the right people about what software and equipment to invest in. The Roods headed to BCMA 2002 in Columbus, OH, and spoke with long-time wall panel software developer and equipment supplier, Tommy Wood. When asked for his recommendation on the basic pieces they would need to start the plant, Tommy said "wall panel design software, Plant Net, an automated push feed, and a framing table with autostop and a layout light bar."

R-Squared invested in IBS equipment and IntelliBuild™ software. "We like the friendliness of the program," said Dean Rood. "You don't need to know CAD to learn the program and run it efficiently and a very large amount of the work can be done using the mouse only."

Overall, the Roods are very happy with the software. "We are pleased with the performance of the software," Dean continued. "The editing features are so easy to run, that design time to production is just hours away."

R-Squared also uses the Plant Net system and feels that it is invaluable. Dean will tell you that "anyone who doesn't use the Plant Net should contact their sales rep and get a few stations."

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Risk Management & Liability Avoidance

New Orleans, LA

A group of eager component manufacturers and suppliers met in New Orleans on March 18 to hear a stimulating risk management seminar delivered by WTCA Legal Counsel Kent Pagel. He covered everything from basic risk management and insurance to risk transfer techniques, customer contracts and scope of work. Attendees, who included manufacturers from as far as New Brunswick, Canada, and Minnesota, listened intently and asked questions pertaining to their businesses.

Often component manufacturers do not put enough emphasis on risk management until after an accident, injury or a claim against the company has been filed. Kent used real life case examples to illustrate the importance of managing risk before disaster strikes.

“I learned a great deal [more] about insurance and contracts than I ever had before.”

—Steve Elkins, Modern Homes & Equipment Co.

“Kent does a great job; he is very engaging!”

—Keith Kylmala, Kylmala Truss



Continued on page 70

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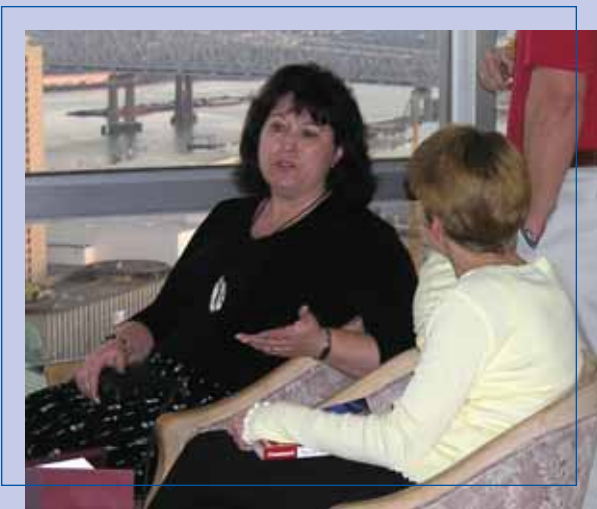
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“Kent’s knowledge of real-life situations hit home with the attendees. The promise of online risk management modules is encouraging!”

—Norm McKenna, MiTek Industries

“Kent was a captivating speaker and his knowledge on specific issues was very strong.”

—Chuck Prasek, Textruss Component Building, Inc.



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NEW ORLEANS

“Kent made a dry but necessary topic very interesting. Thanks!”

—John Wilson, BMC West



For those who missed this workshop, it will soon be even easier to learn about risk management topics such as those addressed at the live seminar. Coming soon is **ORisk**, Online Risk and Liability Management Best Practices for the Component Manufacturing Industry. This will be an effective, economical way to brush up on risk management concerns without leaving the office or your desk.

RISK MANAGEMENT



“After attending this seminar, I can see that the Truss Loading Guide will be a very strong tool for component manufacturers.”

—Rick Barkemeyer, The Truss Co.

Building Code & Design Issues

Las Vegas, NV

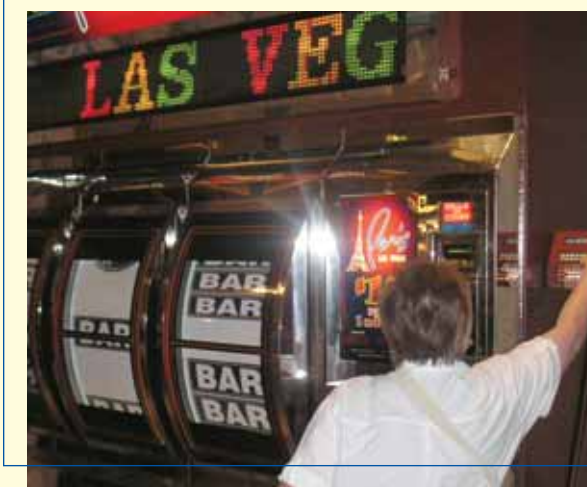
“Don’t gamble on loads!” That was the message on April 1 in Las Vegas. This year’s Building Code & Design Issues Workshop featured a presentation on the **TRUSS LOAD GUIDE (TLG): Guide to Good Practice for Specifying & Applying Loads to Metal Plate Connected Wood Trusses**. The panel of industry experts conducting the seminar included: Richard Zimmermann, WTCA staff; Clyde Bartlett, Bluegrass Truss Company; Christian Chappell, P.E., Alpine Engineered Products; Steve Kennedy, Lumber Specialties Ltd.; Michael Magid, P.E., Robbins Engineering, Inc.; and Brian Wehmeier, MiTek Industries, Inc.

The turnout for the workshop was 78 strong and the odds were in favor of a day filled with important information for technical and design staff as well as company owners and managers. Each participant received a binder overflowing with literature from the workshop sponsors, publications and materials from WTCA, and a copy of the latest **TLG** draft version on CD. In addition, certificates of participation awarding eight hours of professional development credit were handed out at the close of the day.

Thanks to all who participated! The feedback received at the Workshop will be incorporated into the **TLG** Version 1.0 scheduled to debut by May 1. Produced by the WTCA Engineering & Technology Committee in cooperation with the TPI Technical Advisory Committee, this guide will take the industry a major step forward in developing consensus on loads.

“How was this seminar only \$79 for attendees? THANK YOU sponsors!”

—Bryan Hill, A.C. Houston Lumber Co.



Continued on page 72



“Richard’s intense knowledge of the subject and ability to explain the concepts clearly was the best feature of the seminar. The work that has been put into your TLG document is phenomenal. It eliminates questions that I have had for years. Although our standards and codes can get quite gray at times, I believe this document brings information together into a realm which we can now get answers for and in the future progressively all but eliminate the gray areas. This document should be welcomed with open arms and demand the respect of each component manufacturer that loses a job because of these gray areas. Ultimately it will be the consumer who will have the reassurance that they are receiving products with equivalent minimum design specifications regardless of the manufacturer.”

—Chad Fletcher, Plum Building Systems

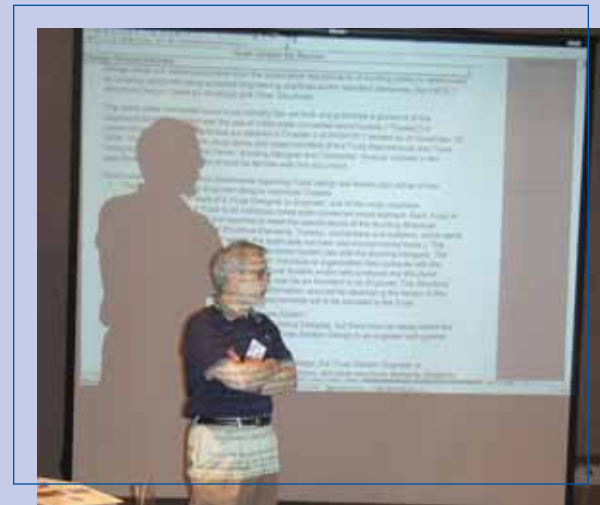


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LAS VEGAS

“Richard’s passion and knowledge of this topic made the seminar worthwhile. After today, I have a broader understanding of loading issues. The ability to discuss issues with fellow component manufacturers was invaluable.”

—David Danielson,
Automated Building Components



And, as you start making plans for winter 2006, keep in mind next year’s **Regional Workshop & Conferences** focusing on risk management and technical issues. We hope to see you there!

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Industry Veteran Remembered for His Colorful Character & Contributions to the Industry

by Melinda Caldwell

Ronnie Wright (1937-2005) lived the kind of life few have the courage to live and made many contributions to the structural building components industry along the way.

It has been said time and time again, that everything is bigger in Texas. By all accounts, this adage holds true when it comes to the life of truss industry veteran, Ronnie Wright. Wright, 67, passed away on February 17 at his home on the Brazos River. Very few who encountered this John Wayne meets St. Nick character ever forgot the impression he made. Even fewer in the truss industry who encountered his equipment forgot his commitment to quality and durability—in many cases because they are still using the equipment they bought from him more than 20 years ago.

Indeed, Wright was one of the pioneers of the truss industry, going back to the late 1950s when he started with Clary Corporation building saws and truss production

equipment in Fort Worth. His entrepreneurial spirit led him and Mike Rosser to start Production Equipment and Engineering in nearby Haltom City in 1968. There he started building and maintaining truss production equipment in the same shop where he grew up a welder's son. According to Wright's only son-in-law, J. Lynn Lunsford, Wright held a number of patents on the machinery Production Equipment built, though he didn't like to brag about it. "What everybody in the business knew was that it was the best around—bulletproof," Lunsford said.

One-time employee and long-time customer Don DeGroot, President of R.E. Sweeney Company in Fort Worth, still has one of Wright's roller presses that dates back to the late 1960s. "Ronnie built the toughest, longest-lasting roller presses in the industry," Degroot recalled. "We have one from the early years that still gets used every day." That roller press is actually the first one Ronnie ever built. It even bears the Serial No. 1.

"Heavy-duty" is a common adjective among those describing Wright's equipment. Murray Beasley and Henry White, retired component manufacturers with 75 years of experience between them, both remember the quality, durability and innovation that Wright's equipment brought to the early days of automation in the industry. "Ronnie manufactured the best equipment on the market at the time [late 1970s]," Beasley remembered. "His floor truss machine was so easy to operate that he once had my wife doing demonstrations at a tradeshow."

White owned Construction Components in Tampa, FL, and bought a lot of Wright's equipment during his 40 years in the industry, most of which was still in use when he sold his business in 1988. "Ronnie came up with a lot of great ideas for the truss industry," said White. "He was the first to put two motors on his roller press, and he developed the most efficient truss tables around. In my opinion, Ronnie gave so much to the truss industry that he was right up there with Carol Sanford. Any time I was ready to upgrade or expand my business, I would consult with Ronnie. He was a dear friend and an honest businessman."

"Be who you are and say what you feel, because those who mind don't matter, and those who matter don't mind."

In the mid-1970s, Wright began a decade-long association with Alpine Engineered Products, manufacturing equipment on his own and stamping Alpine plates. It was during this era that Alpine's Charlie Vaccaro and John Carpenter got to know the already renowned Ronnie Wright.

"Ronnie was the most colorful character in the industry," Vaccaro reminisced. "I remember my very first meeting with Ronnie. I knew that he was notorious for trying to crush your hand the first time he met you, so when I was introduced to him I gave him a dose of his own medicine. His eyes widened a bit and he commented on what a strong handshake I had. We were friends from that moment on.

"I sold Ronnie's roller presses in Florida for Alpine during the '70s when the construction industry was booming," Vaccaro continued. "I must have sold 250 of Ronnie's presses in Florida before the bottom dropped out of construction in the early 1980s. Most of the roller presses I sold are still in operation. There are none that wore out. The few that are not in operation have been stripped for parts; replace the parts and they would be operational."

Carpenter also remembered Wright as an individual who left an impression: "Ronnie was bigger than life in every way—his souped-up Suburbans, his airboat, his Cadillac-cooker and his heart. His equipment was the same—bigger, heavier, stronger and often first. He started the shift from pole to roll-off trailers. He set the standard for roller presses. He had the first wing-jig that I ever saw as well as the first roller-type floor truss machine followed by the 'Fat Man.'"

The big heart to which Carpenter refers gave way to Wright's softer side on many occasions, especially when he was around children. "Ronnie loved kids and they loved him," Carpenter remembered. "When my daughters were about two and four years old, Ronnie visited my home in Austin. He told them that he lived with the tooth fairy. They believed him."

During his heart-warming eulogy at Wright's memorial service in February, Lunsford expounded on his father-in-law's special way with his grandchildren:

He was tough and solid from years of working with wild horses and heavy steel, but he could get his new grandbabies to sleep when no one else could. . . . A lot of people were curious how Ronnie would do as a granddad. To him, the name was important. He didn't want to be Grandpa, or Papa, or anything that made him feel old. His final suggestion: Grandfather the Omnipotent Human Being. We called him Bear-Pa, which seemed to fit. . . . His grandkids thought it was normal to ride in his lap as he drove the airboat, and that everybody had a Bear-Pa with a truck named the War Wagon.

Anytime they spent more than a couple of days with him, we called it going to Camp Yes Sir, No Sir, because they came back so much better behaved.

When it was all said and done, Ronnie Wright lived the kind of life that few have the courage to live. Some described him as a force of nature, abrasive and unsentimental, profane to the point of being poetic, a personality force in the industry. Regardless of people's opinions of him, he lived life on his own terms, even when his way wasn't the most popular. After ending his working relationship with Alpine in the mid-1980s, Wright continued to produce equipment on his own. He fabricated equipment for the wood I-joint industry and the wood furniture industry as well as some machinery for other industries.

In the early 1990s Wright began a working relationship with Robbins Engineering. It was during this time that his sons Riff and Toby helped manage the company. Riff was aware that many people saw his father as being rowdy and unorthodox, but he also learned where his reputation for running a good business came from. He recalled one story in particular:

We got a call from a man who had a truss plant in the Northeast. He said he had a big truss project, but his machine was broken and his business was in a financial bind. He said he didn't have the money to buy a new one, and that other companies weren't willing to deal with him. He said he didn't have money to put down even a deposit, but if he could run the job, he would be able to pay for it.

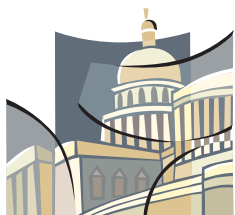
I was skeptical because everybody else had already turned the man down. Dad got on the phone and talked to him for about an hour, and after that call, he had me load up a gantry head on the trailer. Then Dad drove it up to him personally so the man wouldn't even have to deal with the freight costs of getting the machine up there. When I asked him why, he said. "When you're up, everybody wants to help you. When you're down, nobody wants to help you, but that's when a person needs the help the most." Four months later, the man paid for the machine. Two years later, he replaced all the equipment in his shop with our equipment.

In 1994, Robbins Engineering purchased Wright's operation. He retired from the industry in 1998, leaving a legacy of durable equipment that has stood the test of time and a mark on the industry that was as unique as his own fingerprint.

Lunsford ended Wright's eulogy with some eternal wisdom from the beloved Dr. Seuss. There just doesn't seem to be a better way to sum up Ronnie Wright's life than with these words: "Be who you are and say what you feel, because those who mind don't matter, and those who matter don't mind." **SBC**

at a glance

- Ronnie Wright was a bigger-than-life presence in the industry.
- Wright's equipment was innovative and built to last. His commitment to quality and durability remain a lasting legacy.
- Friends, customers and family remember Wright's humor, compassion and his one-of-a-kind personality.



Adventures in Advocacy

Visit www.sbcmag.info for legislative updates and alerts.
Questions or article topics can be sent to sshields@sbcmag.info.

Taking on your Lawmaker *Mano a Mano*

by Sean D. Shields

In my last column I argued that establishing a good working relationship with your elected members of Congress may take more than an annual visit to their office during the May **SBC** Legislative Conference. As a consequence, I also mentioned WTCA's efforts to encourage component manufacturers to visit with lawmakers when they are in the home district offices. What I neglected to discuss is what you should do if you actually meet with them. In an effort to rectify my egregious error, I offer the following suggestions:

One, be yourself. While this may be common sense, it is the single most important piece of advice. Even though lawmakers, in their official role as an elected representative, may be confident or even arrogant, you will be served best by doing what you do best: being yourself. Not only will your message be more sincere, it is more likely they will remember and trust you and your opinion.

Two, talk about what you know. You may own and run a business, manage a business or work tirelessly to improve the products and reputation of a business. Whichever the case, you know a great deal about the problems and issues your company faces: cost of materials; workforce quality and ability to provide them health care coverage; adequate risk management and affordable insurance premiums; and accounting, taxation and reporting requirements. Government can provide relief in almost every case, if effectively persuaded to do so.

Don't hesitate to begin any meeting with a discussion of what you do, what your company produces and what issues you specifically face. Remember, your lawmaker is a representative for YOU, and it is their responsibility to address your concerns on a national stage. Beyond the valuable perspective you provide, this sort of discussion can help everyone feel more comfortable at the meeting.

Three, come prepared. After the lawmaker knows who you are, what you and your company does, and some of the issues you face, it is a good idea to be prepared to talk about some industry-wide issues. WTCA is here to help you in that endeavor. In many instances, on issues like immigration, softwood lumber, steel or construction defect litigation, talking points have been developed for you to use. Talking points are just that, brief statements that can provide either pertinent facts or

concise arguments you can use to help you talk about a given topic.

In addition, WTCA has developed a new **Policies & Positions Handbook** with updated information on issues facing the structural building components industry. This document is something you can give to the lawmaker before, during or after your meeting as a reference guide. In addition, the new handbook makes full utilization of the latest advocacy tool in your arsenal: the **SBC** Legislative web site (www.sbcleg.com). It will always be a good idea to check this web site before any meeting with a lawmaker to get the latest information on hot-button legislative topics. Content on this web site will be continually updated as new information becomes available.

Four, be timely. Lawmakers are dealing with a large number of issues at one time, but they aren't dealing with every issue. There will invariably be times when a problem facing your business is not on their "radar screen."

While they may politely listen, it can be virtually impossible to convince them they should do something about it in the short term.

In some cases, this is due to the fact their time, and that of their staff, is fully extended in its current commitments. Adding something new, unless they see a direct and broad connection to their overall constituency, is out of the question. In other cases, they may judge that such an issue would be exceedingly difficult to make any progress on with their colleagues on Capitol Hill. If it can't be tied to something already in the national spotlight that particular session, they may judge it isn't worth the effort.

However, if you follow the advice above about utilizing the handbook and the web site, this shouldn't be a problem. There is a committed staff working behind the scenes to monitor legislation and trends in Congress to know what's going on and what trends are emerging so that you can always be timely and know how to tie your issues to the national issues that your lawmaker is already in tune with.

Five, be brief. This is different than being in a hurry. Don't skip on sharing vital information about yourself, your business, or the issues and perspectives you want to share with them. What this does mean to highlight is the fact lawmakers are BUSY people, and, for that matter, so are you. Everyone will benefit from a meeting that is just as long as it needs to be.

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mentemployment



WTCA's Employment Portal

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Post Résumés

Search Résumés

Search Available Job Openings

View Industry Job Descriptions

www.wfd.woodtruss.com/index.php

For reader service, go to www.sbcmag.info/wtca.htm

For more information about WTCA Chapters and how to become more involved, contact Anna L. Stamm (608/310-6719 or astamm@qualtim.com) or Danielle Bothun (608/310-6735 or dbothun@qualtim.com). Contributions to Chapter Corner, including pictures, are encouraged. Submissions may be edited for grammar, length and clarity.



Chapter Spotlight

A Special "Thanks" to the Chapters

by Anna L. Stamm

This year, WTCA staff began attending chapter meetings on a quarterly basis and we would like to extend a special "Thank You" for the warm welcome we have received. We always knew that our members were the best around and you have certainly proven that to us!

Our experiences at chapter meetings are a constant reminder of why we as staff care as much as we do about serving our membership. Without exception, our membership is helpful, appreciative, thoughtful, knowledgeable, friendly and just plain fun to be around. We are learning a lot and hope you are too! Please let us know when we can be of even more assistance to you and your chapter. If you miss the chance to speak with a staff member at your chapter meeting, feel free to give us a call or send an email instead. We are eager to hear your feedback, suggestions, ideas, criticisms, compliments and concerns. Just let us know what is on your mind and how else we can continue to work with and provide support to you and your chapter.

So, thank you for a great start to this new program. We look forward to seeing even more of our members' smiling faces as we work together in the months to come. **SBC**

investigations and jobsite injury. The chapter membership discussed a fatal jobsite accident that involved one of the chapter members. In this case an OSHA inspector turned matters over to the District Attorney's office to deploy law AB1127 (passed in 1999) which increases the penalties and liabilities, including possible criminal sanctions, against employers for serious injuries or fatalities sustained on the jobsite. Though the component manufacturer in this case may have faced two years in jail and \$1.5 million in fines, the final settlement included no fines but an agreement to provide educational presentations to the construction industry to prevent these kinds of accidents in the future. Chapter members explored how component manufacturers may act to better protect themselves and their businesses. It was agreed that the chapter would begin working with WTCA to draft a jobsite truss off-loading guide to improve safety at the jobsite. This guide will be modeled after BCSI and provide extra risk management protection as it fulfills the manufacturers' duty to warn.

On March 17, CalESCA held a statewide meeting in Sacramento. Kirk Grundahl of WTCA staff led a roundtable discussion on issues affecting members' businesses. Included on the agenda were electronic seals and signatures, transportation issues and CHP regulations, building codes and the IRC, preservative treatments, and building official education. The final action was to have all members decide upon two or three issues that they have a passion for working on over the next six months to a year. The issues will be prioritized at the next meeting and work will begin on at least the top two issues.

Colorado Truss Manufacturers Association

Continuing with its schedule of holding quarterly meetings on the second Tuesday of the month, the Colorado Chapter met on March 8 in Denver. Sean Shields of WTCA staff delivered a presentation on the Operation Safety program. Members also discussed a recent accident at a truss plant. As it plans its events for the year, the chapter is excited to be hosting the WTCA Open Quarterly Meeting in August in Denver. Members plan to prepare a presentation on their chapter for the meeting and possibly organize a golf tournament for the attendees. The next chapter meeting will be on June 14.

Iowa Truss Manufacturers Association

The Iowa Chapter welcomed three legislators to its March meeting: Senator Tom Hancock from Iowa Senate District 16, Representative Ray Zirkelbach from Iowa House District 31, and Representative Sandy Greiner from Iowa House District 89. The open forum session began with a general review of a summary of bills of interest to chapter members. Specific topics of interest were then discussed in more detail including: the Iowa Values Fund (a state-funded economic development initiative), commercial property tax rates, wind energy initiatives, concerns with recent stepped up enforcement of Storm Water Management codes, Notice and Opportunity to Repair House and Senate Study Bills, IDOT oversized load permits and local traffic jurisdiction, and the Senate bill to establish a Fire Marshall's State of Iowa

Fire Code Advisory Committee. Senator Hancock said he would propose an amendment that would include the Iowa Truss Manufacturers Association on the Fire Code Advisory Committee. There was consensus that this was a very worthwhile exchange that potentially will be of great benefit to ITMA membership. (Senator Hancock was successful in adding ITMA to the Committee later in March.)

Following the legislative session, updates were given on the WTCA February Open Quarterly Meeting and the ITMA Education Committee. The chapter was presented with a letter of thanks for its \$1,000 contribution to the Carbeck Structural Components Institute. The chapter is working with WTCA staff on a shortened version of the "Fire Performance of Wood Trusses" presentation. In addition, the chapter's suggestion for a new tag from WTCA that would caution individuals to refer to BCSI Summary Sheet(s) and materials provided in component manufacturer's jobsite package before handling, storing or installing components is moving forward. The next ITMA meeting will be combined with the annual golf tournament on June 8 at the Harvester Golf Club in Rhodes.

Mid South Component Manufacturers Association

The Mid South Chapter held its first meeting of the year in Natchez, MS in March. The lunch meeting promised a roundtable discussion for chapter members to exchange information and feedback on the issues they have been facing. The guest speaker was Rachel Smith of WTCA staff who highlighted the WTCA programs and initiatives that have been designed to give members leading-edge information and resources. Following the presentation, chapter members discussed the educational programs and tasks they would like to see the chapter accomplish this year including making a presentation at the Louisiana Civil

Engineers Conference in September. In addition, the members decided to have WTCA staff handle the chapter's administration.

Missouri Truss Fabricators Association

The Missouri Chapter held its March meeting at a new location in Columbia. The first item on the agenda was professional engineering issues. Senate Bill 278 has been proposed to redefine the rules surrounding the practice of engineering and specifically to toughen the law on practicing engineering without a license. Generally truss manufacturing is exempt from engineering rules and regulations under the current law, but that could change if the new bill gains support. Members discussed how they would respond to this bill as well as their prior experiences with professional engineering issues. All agreed that they must be careful not to represent their businesses as "engineered" components. Likewise, they consistently state that they have technicians on staff rather than truss designers or engineers. Chapter members also agreed to begin more educational projects to target builders and code officials. Discussion on which groups in particular to approach will be resumed at the next meeting on June 9. Officer elections will also be held in June.

Northwest Truss Fabricators Association

In February, the Northwest Chapter welcomed Matthew Gardner as guest speaker. Mr. Gardner is a land use economist specializing in residential and office analysis and he is particularly passionate about urban housing needs. He is currently advising a number of firms with their planned and proposed developments in the Western United States and is a regular speaker on the regional economy as it pertains to real estate and economic matters. He has appeared on CNN, CNBC and

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Chapter Highlights

Central Florida Component Manufacturers Association

This year, the Central Florida Chapter decided to change from meeting monthly to meeting on alternate months. The chapter's upcoming meetings this year are scheduled for the third Tuesday of May, June, September and November. At the chapter's March meeting, members made plans for a summer educational program as well. It will be arranging a one-day seminar for builders and building officials. A sub-committee is working with WTCA staff to determine which Truss Technology Workshop presentations to use. The chapter also hopes to combine the seminar with a truss plant tour. An update will be given on the plans for the educational seminar at the chapter's May 17 meeting.

California Engineered Structural Components Association

Two California Chapter meetings were held in March. On March 15, CalESCA-South met in Riverside with the main topic being OSHA



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John Pugliese, Foxworth Galbraith, Yuma, AZ (Foxworth Galbraith has 3 Hundegger saws in Arizona)

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Chapter Corner

Continued from page 79

KOMO news services to discuss real estate issues and has been cited in the *Wall Street Journal*, *USA Today* and *Washington CEO* magazine. The chapter thanks Mr. Gardner for his excellent presentation.

In March, the chapter sponsored a workshop for members on Truss Design Using the IBC. Richard Zimmermann of WTCA staff delivered the seminar on local code issues and the new *TRUSS LOAD GUIDE (TLG): Guide to Good Practice for Specifying & Applying Loads to Metal Plate Connected Wood Trusses*. With more than 50 attendees, turnout for the seminar rivaled the consistently high turnout at chapter meetings. The next chapter event will be the Annual Golf Tournament on July 12 and the Hole in One prize will be a truck.

Southwest Florida Truss Manufacturers Association

The Southwest Florida Chapter welcomed Ryan Dexter of WTCA staff to its February meeting. Highlighted in his presentation were the online courses that WTCA offers on its Truss Knowledge Online (TKO) web site. Members discussed the use of hiring assessment tools such as the Technical Assessment Test Online (TATO). They also explored the ways that the market does, or does not, push for Truss Technician Training (TTT) certification. In addition, contracts were discussed at length. The chapter will work with staff to write a handout on key legal terms that all component manufacturers should know. In March, it was agreed that the chapter would change its regular meeting schedule. Instead of holding monthly meetings on the first Tuesday, SWFTMA will now meet on the second Wednesday of the month. The meeting on May 11 will include chapter elections.

Western Component Manufacturers Association

The new Western Chapter covering Oregon and southern Washington held a great meeting this February in Tualatin. Though the chapter is still finalizing its official paperwork, members already have an issue to con-

front—truss submittals. The counties in Oregon lack a consistent requirement for truss submittals in the building permit process. Some areas require a full placement plan and all engineered, sealed drawings to be submitted prior to issuing a building permit. Other areas allow project changes after the permit is issued but then never request an updated set of plans. The members present agreed that Marion County has the procedure that seems to work the best. It requires a placement plan showing project design loads, truss locations and the magnitude of any truss-to-bearing reactions over one ton, but it stops short of sealed drawings. The chapter has formed a committee to draft a position statement on why the Marion County procedure works and other counties do not. From that it will work to educate other counties and encourage a statewide position. Another important goal of the new chapter this year is membership recruitment. The expectation is that holding quarterly meetings, including one with a summer golf tournament, will increase awareness of and participation in the growing chapter.

Wisconsin Truss Manufacturers Association

At its winter meeting, the Wisconsin Chapter addressed many of its plans for the coming year. The Educational Committee will be setting up a presentation on proper installation and bracing for the South East Wisconsin Carpentry Joint Apprenticeship. The Website Committee will be exploring additional ways for members to take advantage of the chapter's site, www.wiwtca.com. Chapter member Richco Structures is working with WTCA staff on a test program to streamline QC inspections. A committee will be organized to solicit prizes for the annual golf and fishing outing in August. The Nominating Committee will be collecting candidates for the upcoming chapter officer elections at the May meeting. It was agreed that the presentation for the next meeting would be on treated lumber and ACQ. In addition, the chapter welcomed Richard Zimmermann of WTCA staff as the guest speaker for the day. Richard gave an overview of the new *TRUSS LOAD GUIDE (TLG): Guide to Good Practice for Specifying & Applying Loads to Metal Plate Connected Wood Trusses* and members appreciated hearing more about this tool being developed by WTCA and TPI. The next Wisconsin Chapter meeting will be held on May 12 in Fond du Lac.

Wood Truss Council of North Carolina

The big item at the North Carolina Chapter's winter meeting was its vigorous educational program for the North Carolina Building Inspectors Association. Chapter members were delivering presentations in January in Atlantic Beach, February in Southern Pines, and March in Boone. With audiences comprised of architects, engineers, contractors, building inspectors, and fire officials, the chapter expected over 450 attendees in all. Handouts of selected WTCA publications were sponsored by the chapter too. These presentations reflect the chapter's growing relationship with the NC Dept of Insurance, which members will continue to develop whenever possible. Under new business, members discussed a growing concern with the state's PE laws and whether companies with engineers on staff violate the rules regulating engineering business registration. The NC PE Board had begun prohibiting the sealing of documents unless the PE works for a compa-

Continued on page 87



Calendar of Events

Check out WTCA's web site at www.woodtruss.com for the most current calendar information.

May

- **11:** Chapter Teleconference. For more information, contact Anna at WTCA-National, 608/310-6719 or astamm@qualtim.com.
- **11:** Southwest Florida Truss Manufacturers Association (SWFTMA) Chapter Meeting. For more information, contact Chapter President Jim Swain at 239/437-1100 or jimsw@carpentercontractors.com.
- **12:** Mid Atlantic Wood Truss Council (MAWTC) Chapter Meeting. KatManDu Restaurant, Trenton, NJ. For more information, contact Anna at WTCA-National, 608/310-6719 or astamm@qualtim.com.
- **12:** Wisconsin Truss Manufacturers Association (WTMA) Chapter Meeting. For more information, contact Chapter President Dale Vinson at 920/458-8325 or dale.vinson@unitedbuildingcenters.com.
- **17:** California Engineered Structural Components Association Southern Region Chapter Meeting, 3:00-6:00 pm, The Mission Inn, Riverside, CA. For more information, contact Anna at WTCA-National, 608/310-6719 or astamm@qualtim.com.
- **17:** Central Florida Component Manufacturers Association (CFCMA) Chapter Meeting. Maison Jardin, Altamonte Springs, FL. For more information, contact Chapter President Chuck Stillwaggon at 352/343-0680 or chuck@casmin.com.
- **19:** Minnesota Truss Manufacturers Association (MTMA) Chapter Meeting. For more information, contact Chapter President Jim Scheible at 763/675-7376 or jim_scheible@trussabc.com.
- **19:** South Florida Truss & Component Manufacturers Association (SFTCMA) Chapter Meeting. For more information, contact Chapter President Perky Becht at 772/465-2012 or perky@chamberstruss.com.
- **20:** WTCA-Kentucky Chapter Meeting. For more information, contact Anna at WTCA-National, 608/310-6719 or astamm@qualtim.com.

June

- **2:** West Florida Truss Association Chapter (WFTA) Meeting. For more information, contact Chapter President Rick Cashman at 727/585-2067 or rcashman@ffpstruss.com.
- **8:** Southwest Florida Truss Manufacturers Association (SWFTMA) Chapter Meeting, 12:00 noon, Sam Seltzers, Ft. Myers, FL. For more information, contact Chapter President Jim Swain at 239/437-1100 or jimsw@carpentercontractors.com.
- **7:** WTCA-Illinois Chapter Meeting. For more information, contact Dani at WTCA-National, 608/310-6735 or dbothun@qualtim.com.
- **7-9:** 11th Annual MSR Lumber Producers Council Workshop, Marriott Grand Hotel, Point Clear, AL. Visit www.msrlumber.org for details.
- **8:** Chapter Teleconference. For more information, contact Anna at WTCA-National, 608/310-6719 or astamm@qualtim.com.
- **8:** Iowa Truss Manufacturers Association (ITMA) Chapter Meeting and Golf Tournament. For more information, contact Chapter President Bruce Kinney at 641/394-5718 or brucek@plumbldg.com.
- **9:** Missouri Truss Fabricators Association (MTFA) Chapter Meeting. For more information, contact Dani at WTCA-National, 608/310-6735 or dbothun@qualtim.com.

- **9:** Wood Truss Council of Michigan (WTCM) Chapter Meeting. For more information, contact Chapter President Denny Metiva at 989/792-6800 or dmetiva@deltatruss.com.
- **14:** Colorado Truss Manufacturers Association (CTMA) Chapter Meeting. For more information, contact Chapter President Dennis Wilson at 303/307-1441 or DWilson@HomeLumber.com.
- **15:** Wood Truss Council of North Carolina (WTCNC) Chapter Meeting. For more information, contact Anna at WTCA-National, 608/310-6719 or astamm@qualtim.com.
- **16:** South Florida Truss & Component Manufacturers Association (SFTCMA) Chapter Meeting. For more information, contact Chapter President Perky Becht at 772/465-2012 or perky@chamberstruss.com.
- **16:** Truss Manufacturers Association of Texas (TMAT) Chapter Meeting, Houston, TX. For more information, contact Anna at WTCA-National, 608/310-6719 or astamm@qualtim.com.
- **21:** Southern Forest Products Association (SFPA) 2005 Mid-Year Meeting, Omni Hotel at CNN Center, Atlanta, GA. Extend your stay and attend EXPO 2005, which will immediately follow this meeting. For more information call SFPA's Tami Kessler at 504/443-4464 ext. 222.
- **23-25:** Forest Products Machinery & Equipment Exposition (EXPO 2005), Georgia World Congress Center, Atlanta, GA. Detailed information about the show is available at www.sfpa.org/expo.

July

- **12:** Georgia Component Manufacturers Association (GCMA) Chapter Meeting. For more information, contact Chapter President Bob Burkett at 770/534-0364 or bob.burkett@gamtn.com.
- **12:** Northwest Truss Fabricators Association (NWTF) Chapter Meeting and Golf Tournament. For more information, email Laurie Motter at ldmotter@juno.com.
- **13:** Chapter Teleconference. For more information, contact Anna at WTCA-National, 608/310-6719 or astamm@qualtim.com.
- **13:** Southwest Florida Truss Manufacturers Association (SWFTMA) Chapter Meeting. For more information, contact Chapter President Jim Swain at 239/437-1100 or jimsw@carpentercontractors.com.
- **14:** Alabama Component Manufacturers Association (ACMA) Chapter Meeting. For more information, contact Dani at WTCA-National, 608/310-6735 or dbothun@qualtim.com.
- **19:** Central Florida Component Manufacturers Association (CFCMA) Chapter Meeting. For more information, contact Chapter President Chuck Stillwaggon at 352/343-0680 or chuck@casmin.com.
- **19:** Tennessee Truss Manufacturers Association (TTMA) Chapter Meeting. For more information, contact Chapter President Jerry Robertson at 931/645-3324 or orgaintruss@earthlink.net.
- **20:** WTCA-Arizona Chapter Meeting. For more information, contact Chapter President Terry Lillard at 623/584-8151 or tsl@sunstateaz.com.
- **20:** WTCA-Northeast Chapter Meeting. Holiday Inn, Worcester, MA. For more information, contact Anna at WTCA-National, 608/310-6719 or astamm@qualtim.com. **SBC**

Housing Starts

Housing starts contracted 18% in March to 1.837 million (SAAR). The single family sector fell 14% while multi-family was off 31%. Regionally, there was weakness in all regions. However, permits, an indicator of future activity, were off only 4%.

U.S. Housing Starts				
Millions - Seasonally Adjusted Annual Rate (SAAR)				
U.S. Totals	Mar	Feb(rev.)	% Change	
Starts	1.837	2.229	-17.6%	
Permits	2.023	2.107	-4.0%	
Single Family				
Starts	1.539	1.798	-14.4%	
Permits	1.552	1.641	-5.4%	
Multi Family				
Starts	0.298	0.431	-30.9%	
Permits	0.471	0.466	1.1%	
Starts and Permits By Region:				
NE	Starts	0.188	0.195	-3.6%
	Permits	0.188	0.188	0.0%
MW	Starts	0.309	0.437	-29.3%
	Permits	0.347	0.390	-11.0%
S	Starts	0.837	1.021	-18.0%
	Permits	0.958	0.976	-1.8%
W	Starts	0.503	0.576	-12.7%
	Permits	0.530	0.553	-4.2%

Analysis & Outlook: The drop in housing activity was much stronger than expected and it is not clear why it happened. Housing activity is volatile, particularly the multi-family sector (fewer multi-family builders is one reason). So, it is more important to look at trends. Despite the severe drop in March, starts are up 5.4% in the first quarter of 2005 compared with the same quarter last year and permits are up 3.8% using the same year over year (YOY) format. The months of inventory of unsold homes remains low (less than 5 months at current sales rate), and that means supply and demand are in good balance and implies relative price stability. Today's builders are larger and more disciplined, and that means we should not see the kind of overbuilding we saw in the late 1980s (C. Chan, Dismal Scientist). Housing fundamentals remain solid with long term mortgages still below 6% and the job market is slowly improving—both important in determining affordability. The major economic concern is inflation, which is escalating at the wholesale level with the 4/19 report showing a 4.9% increase (YOY). March CPI numbers showed the YOY rate for all items to be almost 3% as higher energy costs are having an effect. The twin deficits—budget and trade—are going to continue to weigh on the dollar. The FED will be watching these developments (and you should too) as they are all potentially inflationary, and that means potential negative impacts on mortgage rates. Higher energy and food costs will also slow consumer spending, and that will keep the economy from matching last year's robust rate of 4.4%. The best advice is to be vigilant—the housing market will cool somewhat this year with inflation and dollar problems pushing mortgage rates upward. Higher energy costs will also slow the economy. However, all indications to date are that the pull back in housing will be modest at less than 5% in 2005. **SBC**

This housing starts report is provided to **SBC** on a monthly basis by **SBC Economic Environment** columnist Al Schuler. Visit www.sbcmag.info for more economic news.



Builder Banter

Builders See Smart Homes as Smart Choices for Homeowners

According to a survey of more than 1,000 homebuilders conducted by home center retailer Lowe's during the 2005 International Builders' Show in Orlando, the reality of the "smart home" is here and now.

The survey is an indicator that high-tech homes are going mainstream in the housing sector. Nearly two-thirds of the builders surveyed said they already construct homes with an eye on "smart home" technology as it exists now and how it may yet evolve. Ordering an oven to pre-heat or adjusting thermostats remotely from the office or car will become commonplace, along with dozens if not hundreds of other in-home possibilities.

Homeowners are also becoming more aware of the possibilities. A little over half of the builders said their customers ask for advanced information technology now. The majority of builders see smart homes as having already arrived or just a few years away from catching on across the housing spectrum. Only 14 percent of those surveyed think the concept is five or more years away from widespread acceptance. To learn more, read the complete article on HousingZone.com. [Source: Toolbase E-News, February 28, 2005]

OSHA Clarifies Fall Protection Requirements for Working from Exterior Wall Top Plate

Construction workers are not permitted to walk on, or work from, the exterior wall top plate when installing roof trusses or erecting rafters, according to a recent letter from the Occupational Safety and Health Administration (OSHA) clarifying its residential construction fall protection requirements as stated in the OSHA directive - STD 3-0.1A, Interim Fall Protection Compliance Guidelines for Residential Construction.

STD 3-0.1A outlines alternative procedures to conventional fall protection for certain types of residential construction activities and establishes the procedures for installing roof trusses. According to those installation procedures, the first two trusses must be set from ladders, and workers setting the trusses must then climb on the interior top plate, when it is available, to secure their peaks. The directive adds that workers remaining on the top plate must use the previously stabilized trusses or rafters as support while the other trusses or rafters are erected.

It should be noted that several states operate their own state OSHA programs, and may have adopted construction standards that are different from federal standards. Those who live in a state that has its own State Occupational Safety and Health Plan should contact their local program administrator for further information on the construction standards applicable in their state. [Source: NBN Online, February 2005]

Builders Remain Largely Upbeat In April

Strong demand for new single-family homes is helping buoy builder confidence as the

Housing Market Index 2004-05 (HMI)

The HMI is a weighted, seasonally adjusted statistic derived from ratings for present single family sales, single family sales in the next 6 months and buyers traffic. The first two components are measured on a scale of "good" "fair," and "poor," and the last one is measured on a scale of "high," "average" and "low." A rating of 50 indicates that the number of positive or good responses received from the builders is about the same as the number of negative or poor responses. Ratings higher than 50 indicate more positive or good responses.

May	June	July	Aug	Sept	Oct	Nov	Dec	Jan05	Feb	Mar	Apr
69	68	67	70	67	69	70	71	70	69	70(r)	67

Source: National Association of Home Builders

Adventures in Advocacy

Continued from page 76

That's why talking about yourself and using talking points to discuss everything else is so important. It allows you to avoid the three T's: tangents, trivia and tall-tales. Tangents are the statements and stories you may find coming out of your mouth if you don't know what you're talking about or what point you're trying to make. Talking points and the handbook are your single greatest allies in avoiding such tangents.

Trivia are those bits of information or facts you share that don't really support your statements or give strength to your argument. Throwing trivia into the discussion can obscure the good facts you are supplying, or in a worst-case scenario, confuse the lawmaker. Again, talking points and the handbook can help you avoid trivia as well.

Finally, tall-tales are the stories you find yourself telling a group of people at a social function for entertainment value. This isn't a comment on the truth of the story, just the proper time and place for them to be told. As a rule of thumb, unless you are a long-time friend of the lawmaker, these should be avoided at all costs.

If you avoid the three T's, you will drastically improve the odds of scheduling a future meeting with your lawmaker, and that your message will be understood and possibly acted upon. In that regard, it's never a bad idea to follow up a meeting with the fourth T: the thank you note! **SBC**

market heads into the late spring selling season, according to the latest National Association of Home Builders/Wells Fargo Housing Market Index (HMI). (See chart.)

The April HMI edged down by three points to 67, but remained within the strong 67-71 confidence range that builders have held throughout the past 14 months.

"Builders continue to express confidence in the overall housing market and expect sales to remain strong during then next six months," said NAHB President Dave Wilson, a custom home builder from Ketchum, ID.

"Favorable market conditions and the appeal of homeownership continue to fuel demand," said NAHB Chief Economist David Seiders. "Many builders are reporting higher lot prices and some difficulty in finding available land, both symptoms of strong demand for new homes. NAHB expects both home sales and house values to remain healthy in coming months," he added. [Source: National Association of Home Builders Press Release, April 18, 2005]

Health Care Top Concern of Small Business

Health-care costs rank as the most critical issue concerning small business owners, according to a recent survey conducted by the National Federation of Independent Businesses (NFIB) and Wells Fargo. Nearly two-thirds of respondents to the 2004 survey listed health-care costs as "critical." NFIB is supporting calls for federal legislation to allow small business to aggregate under an association to get health benefits similar to those now achieved by large companies.

New OSHA Web Site

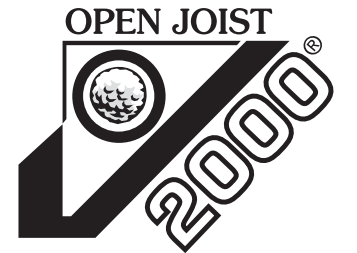
OSHA has launched a web site containing information and tips related to the safety and health of residential construction workers. Visit www.osha.gov/SLTC/residential/ for more information. [SOURCE: *The Journal of Light Construction*, Nov. 2004, P. 20, www.jlconline.com]

Keeping Up on Code Changes

There is no completely easy answer for people interested in keeping up on code adoptions, however, one fairly accurate and complete site for current implementations is www.firstsourceonl.com/index.asp. It requires a login registration (which is free) so that they can send you email, but otherwise it offers a great deal of information regarding the current status of building codes and links to state, county and municipal resources. **SBC**

Email ideas for this department to builderbanter@sbcmag.info.

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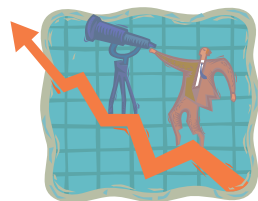
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Industry News & Data

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Consumer Price Index

[an index measuring the change in the cost of typical wage-earner purchases of goods and services expressed as a percentage of the cost of these same goods and services in some base period - called also cost-of-living index]

Expenditure Category	Changes from Preceding Mo.			Compound annual rate 3-mo. ended Feb 05
	Dec	Jan05	Feb	
All Items	0	.1	.4	1.7
All Items Less				
Food & Engery	.2	.2	.3	2.4

Source: Bureau of Labor Statistics

Unemployment Rate

Dec	5.4%
Jan05	5.2%
Feb	5.4%
Mar	5.2%

Source: Bureau of Labor Statistics

Producer Price Index - Customized Industry Data

An inflationary indicator published by the U.S. Bureau of Labor Statistics to evaluate wholesale price levels in the economy.

Engineered Wood Mem. (exc. truss) Mfg.	Annual 04	Jan 05	Feb 05	Truss Mfg.	Annual 04	Jan 05	Feb 05
Eng. Wood Mem.	110.0(P)	115.6(P)	118.2(P)	Truss Mfg.	112.5(P)	116.2(P)	116.9(P)
LVL	109.7(P)	119.0(P)	119.0(P)	Wood Trusses	110.3(P)	113.2(P)	113.9(P)
Other	108.9(P)	114.1(P)	118.2(P)	Primary Products	110.3(P)	113.2(P)	113.9(P)
				Secondary Products	105.1(P)	109.6(P)	110.8(P)

Source: Bureau of Labor Statistics

Consumer Confidence Index

The Consumer Confidence Index is a measure of consumer optimism toward current economic conditions. The consumer confidence index was arbitrarily set at 100 in 1985 and is adjusted monthly on the basis of a survey of consumers.

The index considers consumer opinion on both current conditions (40%) and future expectations (60%).

Aug	Sept	Oct	Nov	Dec	Jan05	Feb	Mar	% Change
98.7	96.7	92.9	90.5	102.7	105.1	104.4(r)	102.4	-1.9%

Source: www.consumerresearchcenter.org

MARCH 2005 ISM BUSINESS SURVEY AT A GLANCE

	Series Index	Direction Mar vs Feb	Rate of Change Mar vs Feb
ISM Manufacturing Index (formerly PMI)	55.2	Growing	Slower
New Orders	57.1	Growing	Faster
Production	56.5	Growing	Slower
Employment	53.3	Growing	Slower
Supplier Deliveries	52.5	Slowing	Slower
Inventories	54.1	Growing	From Contracting
Customers' Inventories	46.0	Contracting	Slower
Prices	73.0	Increasing	Faster
Backlog of Orders	56.0	Growing	Faster
Exports	55.4	Growing	Slower
Imports	58.9	Growing	Slower

For an in-depth explanation of this summary, go to www.ism.ws/ISMReport/ROB042005.cfm.

Industrial Production Index

The industrial production (IP) index measures the change in output in U.S. manufacturing, mining, and electric and gas utilities. Output refers to the physical quantity of items produced, unlike sales value which combines quantity and price. The index covers the production of goods and power for domestic sales in the United States and for export. It excludes production in the agriculture, construction, transportation, communication, trade, finance, and service industries; government output, and imports. The IP index is developed by weighting each component according to its relative importance in the base period. The information for weights is obtained from the value added measures of production in the economic censuses of manufacturer and minerals industries, and from value added information for the utility industries in Internal Revenue Service statistics of income data. The weights are updated at five-year intervals to coincide with the economic censuses. The current index base year is 1992. (r=revised)

	Dec	Jan05	Feb	Mar
Industrial Production Total Index (% change)	0.8	0(r)	0.2(r)	0.3
Capacity Utilization Total Industry (%)	79.2	79.2	79.3 (r)	79.4

Source: Federal Reserve Board

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Announcements

ALPINE ENGINEERED PRODUCTS, INC. PROMOTES DUNBAR TO GM OF TRUSSTEEL® DIVISION

Dave Dunbar, National Sales Manager of Alpine's TrusSteel CFS truss division, has been promoted to the position of Divisional General Manager. Dunbar assumed full operating responsibility for the division on April 1. Dunbar has been an associate of Alpine for over 20 years and his previous responsibilities have included truss engineer, Regional Chief Engineer and Software Consultant, for plated truss fabricators in the Northeastern U.S. While working in the plated truss engineering group, Dunbar earned his Professional Engineer's certification and followed that by receiving an MBA while working with the TrusSteel Division. The wealth of design, sales and fabrication knowledge he has gained, while helping to create the CFS truss industry, makes him uniquely qualified to lead the TrusSteel Division to continued success, innovation and growth, for years to come.



NEW GM AT SAFETY SPEED CUT

Safety Speed Cut Mfg. Co. announced the promotion of **Brian Donahue**, current Director of Sales and Marketing, to the position of General Manager. Donahue's natural leadership skills have earned him the respect and support of the entire company and at the same time he has demonstrated a willingness to take direction and broaden his overall busi-

ness knowledge. In his new position, he will be responsible for all aspects of the day-to-day operation of Safety Speed Cut, including sales, operations, finance and administration.

CM News

RAZOR SUPPORTS HORTON EXHIBIT

Razor Component Systems, Inc. recently supplied their builder client DR Horton with a display for their exhibit at the Savannah Home Show, at the request of Horton's Glen Gault. Top Razor management personally went to the exhibit site and erected the structure. They also cleaned up and dismantled it following the show's close. Razor's team cleverly set it up to have the tie down bolts protruding into imaginary concrete so attendees could easily see the depth. A financial advisor in the booth asked Razor's CEO, Mike Cahoon, product questions, and his conclusion was that the structure was a superior combined engineering system. Cahoon said, "The display was much like that of a Volvo demonstration: it's what you don't see that makes it a legend in safety."

CAPITAL STRUCTURES PARTICIPATES IN HOME SHOW

Capital Structures participated in the recent Northwest Arkansas Home Builders Association's 2005 Home Show. A demonstration house was constructed inside the track center. WTCA Member, Capital Structures, assembled a two-story, 1,020-square-foot house in five hours. Capital Structures President Steven Spradlin said the larger components of the house were panelized and transported to the track center where they were assembled on the

SBC Industry News

SBC Staff recently upgraded the technology used to deliver Industry News on our web site: www.sbcmag.info.

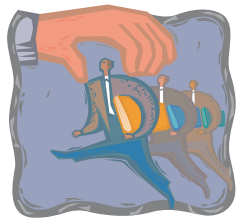
Staff will be providing weekly updates to the site and reminders to our readership via email. Watch your inbox for the latest news headlines from *SBC Magazine*!

spot. A timelapse video of the home erection can be viewed at www.capstructures.com/projects/capstructures/homeshow.php. [Source: *NWA News*, 3/17/05, www.nwanews.com]

41 TRUSS COMPLETES EXPANSION

41 Truss recently finished construction on a new facility in Spring Hill, FL. The new plant sits on a 9.5 acre site and includes a 25,000 sq. ft. clear span facility. The new location, across the street from their present plant, utilizes all new, state-of-the-art production equipment. For more information, logon to www.41truss.com. **SBC**

Visit www.sbcmag.info for additional industry news & announcements!



Classified Ads

ACCOUNT MANAGERS

The **Accounts Manager** is responsible for generating new sales and customers. **Qualifications:** Ability to travel, experience in housing construction required, ability to pass a drug test. **Supervisor:** Eric Walden, Reg SM Manager, TN & Dickie Vail, GMO. **Location:** Market #1 Knoxville, TN, #2 Nashville, TN, #3 Huntsville, AL. Interested individuals should contact Eric Walden at: ewalden@ufpi.com or fax résumés to 423/238-9413.

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Contact Linda Lumb at 817/633-5100 or lindalumb@truswal.com. Send résumés to:

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Product Application Engineer

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- Some background in wood products or building design.
- BS Degree in Civil-Structural Engineering or Wood Science
- Engineer in Training (EIT). Professional Engineer (PE) preferred.
- Product testing and strong statistical background.
- Strong computer skills including FE analysis, spreadsheet development and CAD.
- Ability to travel 25% of time with occasional off-site assignments up to 3 months.
- Superior interpersonal, writing and presentation skills.

Qualified candidates are encouraged to forward their résumé to: Huber Engineered Woods LLC, Attn: HR-DD, One Resource Square, 10925 David Taylor Drive, Suite 300, Charlotte, NC 28262.



Chapter Corner

Continued from page 80

ny that is specifically an engineering firm. The chapter will explore its options in this situation. Last but not least, new chapter officers were elected. Jack Parker moved to the position of Past President and Chris Lambert became President. Tom Hollinshed accepted the Vice Presidency, John Presley the Secretary post, and Corey Misenheimer remained Treasurer. The upcoming meeting dates were set for Wednesday, June 15, and Wednesday, November 9.

WTCA-Illinois

For its first meeting under its new name, WTCA-Illinois (formerly the Greater Chicago Area Truss Manufacturers Association) moved its meeting location south to the Starved Rock Lodge and Conference Center in Utica. The meeting topic was the development of a statewide building code and the guest speaker was Richard Piccolo, President of B&F Technical Codes Services, Inc., a consulting agency specializing in building and fire protection plan reviews, inspections, training and general code consulting services. Mr. Piccolo is a Certified Firefighter, Fire Inspector, Building Official, Certified Master Code Professional and an author/instructor of training seminars on the model codes. The chapter thanks Mr. Piccolo for his informative presentation. In addition, members reviewed the success of the Truss Technology Workshop and plant tours for building officials in both the Monticello and Rockford areas earlier that month. Members planned to continue offering these seminars throughout the spring. The next chapter meeting was scheduled for June 7 at a location to be determined.

WTCA-Kentucky

The Kentucky Chapter held its first official meeting of the year on February 18 in Lexington. Several familiar faces gathered to restart the chapter and determine a regular meeting schedule. The first issue discussed was lumber quality, including problems with mold and wane. Members were glad to note that the mold issue had subsided, but were distressed with the wane found especially in the middle of lumber packages. Members were also confronting a new issue with sealed placement diagrams. Architects and engineers have been requesting sealed diagrams, and some members have walked away from jobs rather than accept the increased responsibility without compensation. The chapter will start educating code officials so that they see where the responsibility truly lies. Similarly, the chapter will develop a plan to use the Carbeck Fire Performance CD and plant tours to educate local fire officials. Rounding out the meeting, everyone present was encouraged to consider becoming a chapter officer and recruit more members to attend the meetings. The next quarterly meeting will be held on Friday, May 20 in Lexington. **SBC**

For more information, about WTCA Chapters, contact Anna L. Stamm (608/310-6719 or astamm@qaltim.com) or Danielle Bothun (608/310-6735 or dbothun@qaltim.com). Contributions to Chapter Corner, including pictures, are encouraged. Submissions may be edited for grammar, length and clarity.

In Memoriam

Robert Ennis

On March 22, the Western Florida Truss Association lost a very active member of the truss industry with the passing of Robert Ennis.

Bob started his career with WD truss in March 1980. As a table crew member his talents were recognized and he soon became a table leader. In 1983, he was moved into the engineering department and within a few short years became the Engineering Manager. Bob assisted in making a small company grow from 2.5 million in sales to the largest for its time to 6.5 million annual sales. In 1998, the operations were moved to North Tampa as Engineered Structural Systems with the Engineering and Sales located in Ybor City. Bob moved into full time sales and quickly excelled as a result of his engineering and manufacturing background.

After health reasons had him semi retire, he later became able to again work and was hired in August 2002 by 41 Truss to be Special Engineering Manager. He performed excellently up until the week he passed.

He was Past President of Pasco Builders Association as well as Past President of the West Florida Truss Association, and was a true advocate of the truss industry. He is survived by his wife, 2 sons and 1 daughter. He was 55.

Daniel C. McCarthy

Col. Daniel C. McCarthy, 61, of Calhoun, GA, and formerly of Terre Haute died Tuesday, March 22, 2005, after an extended illness. He was a member of numerous historical and genealogical societies, and was the publishing editor of Self Family Newsletter since December 1982. He was born Feb. 28, 1944, in Vigo County to Daniel W. McCarthy and Nita Rose Payne. Survivors include his wife of 35 years, Cheryl Elizabeth McCarthy; two sons, David Michael Conway and his wife Yohanna Kelly and their daughters, Chloe Marie and Anne Elise Michaela Conway, and Daniel Patrick McCarthy and his wife Sharen Stephens and their sons, Andrew Justin Harper and Daniel Garrett McCarthy; one daughter, Maureen Elizabeth McCarthy and her son, Sean Devon Patterson; three brothers, Michael Paul McCarthy of Reno, NV, John R. McCarthy of Cumming, GA, and Patrick Brian McCarthy of Hayward, CA; and one sister, Marilyn Pennington of Buford, GA. He was preceded in death by his parents. He graduated from Otter Creek High School in 1962 and later attended Indiana University-Purdue University in Indianapolis. He served in the U.S. Navy from 1963-1965 on the aircraft carrier U.S.S. Franklin D. Roosevelt, CV-42. He was a member of First Christian Church of Adairsville, GA.

Glenn Traylor, District Sales Manager of Alpine Engineered Products, knew Dan well from his work in the structural building components industry:

Dan was an instrumental employee of North Georgia Truss in Cartersville, GA. Dan served as a designer and salesman for North Georgia Truss. He was Secretary/Treasurer for the Georgia Component Manufacturers Association (GCMA). Dan was strong supporter and a very active member of the chapter, rarely missing a meeting. Dan was instrumental in growing our membership by keeping track of meeting plans and getting the word out via phone calls and email.

Submissions to "In Memoriam" can be emailed to editor@sbcmag.info. Photos are encouraged and will run as space allows. Submissions may be edited for grammar, length and clarity.

WTCA Financial Performance Survey

Be sure to participate in this valuable industry survey! Participants will receive the results—FREE!

Surveys were mailed to WTCA Members on March 14. Completed surveys are due May 16.

Questions? Contact WTCA Staff at 608/274-4849 or wtca@woodtruss.com.

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Eagle Metal Products ★

Pg: 16 Serving the building components industry for over 20 years with connector plates, engineering services, design software and truss equipment, Eagle is committed to providing superior customer service and the most competitive pricing in the industry. Eagle's Field Repair Press has become standard equipment for truss plants today. With over 1,500 units in use worldwide, it is the single most popular piece of equipment ever developed for the building component industry!
Tom Whalley • 800/521-3245 • 903/887-1723 fax
Email: twhalley@eaglemetal.com
Web site: www.eaglemetal.com

The Hain Company ★

Pg: 83 We specialize in developing solutions for lumber and truss yards, wall panel plants, and shed manufacturers as well as any random length cutting or precut packaging operation. Our solutions will help simplify and increase your production because our products are cost effective, durable and easy to use. Our list of machinery includes the newly re-introduced "Hain Systems Framer" framing table, "CMI AutoFramer™" wall panel software, "Hain Measuring System", "Hain Quick Rafter Cutter", "Hain Vent Block Drill", and the new "Hain Sub-Component Nailer." We are also a manufacturer's representative for some of the top names in the component manufacturing industry!
Dan Martin • 530/295-8068 • 530/295-0468 fax
Email: sales@haincompany.com
Web site: www.haincompany.com

HOLTEC Corporation ★

Pg: 4 Holtec's Transcut Portable Crosscut Saw is used to cut whole bunks of lumber. Holtec also offers the Precision Crosscut System for precision-end trimming.
Sam Rashid • 800/346-5832 • 813/752-8042 fax
Email: info@holtecusa.com
Web site: www.holtecusa.com

Hundegger USA L.C. ★

Pg: 79 Hundegger's K2 fully automated component cutter and timber mill is the most used and most advanced CNC sawyer and joinery machine in the world. With nearly 2000 customers and 20 years of experience, the Hundegger K2 is the ultimate component saw cutting simple trusses to compound beams with ZERO set up.
Steve Shrader or Kip Apostol • 435/654-3028 • 435/654-3047 fax
Email: info@hundeggerusa.com
Web site: www.hundeggerusa.com

Intelligent Building Systems, a Truswal Company ★

Pgs: 66-67 Intelligent Building Systems, the Wall Panel industry's premier "total" solution provider, offers the tools to increase your efficiency and profitability. This encompasses the dynamics of "The WallBuilder" wall panel software, providing accurate data, the flexibility to make quick changes and the ability to design panels that you need to build. The state of the art "Plant Net" terminal is for the various stations in the plant, with a 17" monitor providing a clear visual aid that results in increased production, reduces plant errors and eliminates the paper trail. The framing equipment ranges from manual to automated lines, which allows unskilled labor to frame with accuracy and speed while producing a quality product.
Carl Schoening • 800/521-9790 • 817/652-3079 fax
Email: carlschoening@truswal.com
Web site: www.truswal.com

International Paper ★

Pg: 53 International Paper (<http://www.internationalpaper.com>) businesses include paper, packaging and forest products. As one of the largest private landowners in the world, IP professional foresters and wildlife biologists manage the woods with great care in compliance with the rigorous standards of the Sustainable Forestry Initiative® program. The SFI® program is an independent certification system that ensures the perpetual planting, growing and harvesting of trees while protecting biodiversity, wildlife, plants, soil, water and air quality. In the U.S. alone, IP protects more than 1.5 million acres of unique and environmentally important habitat on its forestlands through conservation agreements and land sales to environmental groups. And, the company has a long-standing policy of using no wood from endangered forests. Headquartered in the United States, IP has operations in over 40 countries and sells its products in more than 120 nations.

Kim McGowan • Email: kim.mcgowan@ipaper.com
Web site: www.ipwood.com

Klaisler Manufacturing Corp. ★

Pg: 85 Klaisler Manufacturing Corp. has been providing quality truss fabricating equipment to the truss building industry for over 50 years. Our products include our Roof Truss Gantry Systems, Floor Truss Gantry Systems, PCT machines (Roadrunner), Truss Stackers, In Feed Decks, Conveyors and the Rolsplicer. Our latest design in steel top truss tables, the WEG-IT table series, is designed to increase jig holding power, speed your production and provide a more durable, longer lasting table. Along with the tables, Klaisler also provides the WEG-IT jiggling system (patent pending). Klaisler; service and support when you need it, where you need it!
Sean Hubbard • 877/357-3898 • 317/357-3921 fax
Email: info@klaisler.com
Web site: www.klaisler.com

The Koskovich Company ★

Pg: 91 The Koskovich Company, recognized as the originator of automated saws for the truss and wall frame components industries, manufactures fully automated precision woodcutting, assembly, and handling equipment. An ever expanding product line includes the recently introduced single blade linear feed Omni-Miser Cut-off and Marking System for roof truss and wall frame components; Omni Mini-Miser Cut-Off and Marking System for wall frame components; Auto-Omni Robotic Component Saw; Omni Jet Set Truss Jiggling System; and associated Automated Material Handling Equipment. All are automation "firsts" in the wood processing industry.
Jerry Koskovich • 507/286-9209 • 507/285-1730 fax
Email: jerryk@omnisaw.com
Web site: www.omnisaw.com

Lacey-Harmer Company ★

Pg: 63 Lacey-Harmer Company has been serving the wood products industry for 70 years. The building components side of the business became part of the package in the early 1990's. Recent products being sold into the industry include the Sense-a-Plate™ system used for identifying missing plates and the Easy Empty Container—"The Orange Box" self dumping hopper whose safer design has proven to dramatically reduce the number of accidents related to forklift/dumpster combinations. These products, along with laser projection systems and chain products provide a nice package of goods for the industry.
Jim Overson • 800/367-9992 • 503/222-0073 fax
Email: info@laceyharmer.com
Web site: www.laceyharmer.com

Lakeside Trailer Manufacturing, Inc. ★

Pgs: 20-21 Lakeside Trailer offers roll-off models for delivery of wood components, wall panels and lumber packages. Lakeside was the first to produce stretch roll-offs with sliding tandem.
Lee Kinsman • 573/736-2966 • 573/736-5515 fax
Email: lee@rollerbed.com
Web site: www.rollerbed.com

Mango Tech International ★

Pg: 17 Mango Automation enhances your new or existing saw's performance. Mango Tech Solutions can be retro'd to most types of saws and conveyors.
1866-GO-MANGO • Web site: www.mangotech.com

MiTek Industries, Inc. ★

Pgs: 2-3, 51, 55, 59 MiTek is the single-source supplier for component manufacturers. We offer 20/20 "Perfect Vision"® software, eFrame® whole house design software, integrated management and production software along with engineering services, connector plates, builders products, and steel trusses...also the very latest in component manufacturing equipment: saws, presses, material handling systems, laser projection systems, inkers—and more. Check out our new wall panel division. It features Industry-leading eFrame® and WalPlus®+ design software, and a complete line of specialized equipment for optimized production of wall panels.

Michael Klein • 800/325-8075 • 314/434-5343 fax
Email: mike.a.klein@mii.com
Web site: www.mii.com

Monet DeSaww Inc. ★

Pg: back cover Buy a DeSaww® and Increase Your Profits! With many years experience in manufacturing, our design engineers and staff are dedicated to providing you with the highest quality Auto, Semi and Manual Component Saws and Lumber Feed Systems available. Call us for aftermarket parts for DePaww, and DeSaww® Saws.
877/642-4900 • Email: desaww@socket.net
Web site: www.desaww.com

MSR Lumber Producers Council ★

Pg: 38 The MSR Lumber Producers Council represents the interest of MSR Lumber Producers in the manufacturing, marketing, promotion, utilization, and technical aspects of machine stress rated lumber.
Kathy James, Business Manager • 888/848-5339 • 888/212-5110 fax
Email: msrlpc@msrlumber.org
Web site: www.msrlumber.org

NUCONSTEEL ★

Pg: 43 NUCONSTEEL™ is America's fastest growing steel framing company. A subsidiary of Nucor, America's largest steel producer, NUCONSTEEL™ designs and manufactures a wide range of light gauge steel framing products for residential and light commercial construction. Since 1997, NUCONSTEEL™ has been providing solutions for virtually every steel framing application in the industry.
Courtney Hanson • 940/891-3050 • 940/891-3090 fax
Email: chanson@nuconsteel.com
Web site: www.nuconsteel.com

Open Joist 2000 ★

Pg: 83 Open Joist 2000 offers an all wood open-webbed trim-mable truss. This engineered wood product is available from a network of distribution throughout North America. Certain areas are still available for manufacturing licensee rights.
Michel Beauchamp • 800/263-7265
Email: mike@openjoist2000.com
Web site: www.openjoist2000.com

PANELS PLUS ★

Pg: 80 Our complete line of wall panel equipment evolved through many years of component industry experience by Wasserman & Associates. The Lou-Rich family of companies adds extensive machinery experience and ISO 9001 quality registration, along with the motivation of employee owners. Our team is committed to applying our vision to support your operation: Growing Together, Delivering Solutions, Adding Value.
Stan Axsmith • Toll Free 866/726-7587 (PANPLUS) • 507/373-7110 fax
Email: sales@panplus.com
Web site: www.panplus.com

Pratt Industries, Inc. ★

Pg: 38 Pratt Industries has been in the manufacturing business for the past 30 years. Any type of transportation equipment Pratt can build it. Four plants, over one million sq. ft. of manufacturing plant space. Quality workmanship and durability are some of the features that make a Pratt Truss Trailer the trailer of the century.
Danilo "Dan" Claveria • 727/584-1414 • 727/584-2323 fax
Email: dan@prattinc.com
Web site: www.prattinc.com

Qualtim, Inc. ★

Pg: 45 Qualtim is a technical marketing company dedicated to assisting companies that transact business in the structural building component market. We offer a broad range of marketing services. Our talented staff creates ads, product brochures and web sites. Our technical work consists of forensic engineering/expert witnessing and general structural engineering and fire performance consulting. At Qualtim, we guarantee a fair day's work for a fair day's pay.
Lora Gilardi • 608/310-6711 • 608/271-7006 fax
Email: info@qualtim.com
Web site: www.qualtim.com

Rand Manufacturing, Inc. ★

Pg: 36 Rand Manufacturing is a leader in providing quality truss manufacturing and delivery equipment. Rand has developed the Roll-down series truck bodies in 24-30' lengths as well as the Roll-down 48' trailer to help make delivery breakage a thing of the past. We also developed the High Ryder Gantry Truss Transfer system and the Auto Set 10-30 Floor truss machine. Please contact us for more information on these innovative products.

Ashley Brown • 800/264-7620
Machinery Div. • 252/426-9900 • 252/475-1470 fax
Email: abrown@randmanufacturing.com or
twilliams@randmanufacturing.com
Web site: www.randmanufacturing.com

Robbins Engineering, Inc. ★

Pg: 39 Robbins Engineering offers truss plates, engineering services, OnLine Plus™ layout software, and a complete line of truss production and lumber handling equipment including the SuperTorque™ Roof Truss Gantry and the FatMan™ Floor Truss System.
Doug Folker • 813/972-1135 ext. 268 • 813/978-8626 fax
Email: info@robbseng.com
Web site: www.robbseng.com

SFS intec, Inc. ★

Pg: 64 SFS intec, Inc. is a manufacturer of fasteners for the metal building and roofing industries as well as innovative fastening systems for structural timberwork. We offer technical and design support with high quality products. Our technological advances provide new market solutions to make you more competitive.
Cindy Weaver • 610/790-2622 • 610/376-0932 fax
Email: wcyin@sfsintec.biz
Web site: www.sfsintecusa.com

Simpson Strong-Tie Company, Inc. ★

Pg: 61 Simpson is the world's leading manufacturer of truss-to-truss and related connectors offering unequalled technical support from regional engineering staff, specialized training seminars, extensive code compliance reports and standard setting literature. A free CD-ROM is available which includes all publications, reports, drawings, bulletins and connector-selected software.
Mike Bugbee • 925/560-9060 • 925/833-1496 fax
Email: mbugbee@strongtie.com
Web site: www.strongtie.com

Southern Pine Council ★

Pg: 54 The Southern Pine Council (SPC) is a joint promotional body coordinated and supported by producing members of the Southern Forest Products Association (SFPA) and the Southeastern Lumber Manufacturers Association (SLMA). Both associations represent manufacturers of Southern Pine lumber. SPC is the leading source of information about Southern Pine products for design-build professionals and consumers.
Catherine M. Kaake, P.E. • 504/443-4464 ext. 213 • 504/443-6612 fax
Email: info@southernpine.com
Web site: www.southernpine.com

Stiles/Homag Canada/Weinmann ★

Pg: 13 Weinmann offers a complete range of machinery for the efficient and economical production of frame wall, SIP wall, floor, and roof components including assembly and tilt tables, automatic framing stations, and automatic fastening with nailing, stapling, and screw driving equipment. Weinmann features fully-automated CNC processing with its unique multi-function bridge machines. Stiles Machinery Inc. is pleased to sell and service Weinmann component manufacturing systems in the USA. Weinmann is represented in Canada by Homag Canada.
Michael Miller • 616/698-7500 ext. 232 • 616/698-9411 fax
Email: mmiller@stilesmachinery.com
Web site: www.stilesmachinery.com

Stoll Trailers, Inc. ★

Pg: 31 Stoll Trailers is a manufacturer of roll-off truss/wall panel trailers. Our trailers are built in lengths of 28, 32, 36 and 40 with gooseneck hookup, which provides easy maneuvering, and generally pulled with a one ton truck.
Bradley Stoll • 864/446-2121 • 864/446-2116 fax
Email: stolltrailer@wctel.net
Web site: www.stolltrailers.com

TADANO America Corporation ★

Pg: 25 Tadano America Corp. represents TADANO brand hydraulic cranes in the U.S. and Canada. TADANO introduced TM1882 truss application tractor mount crane in 2004 and it has earned a great reputation because of operation speed, stiff boom, smooth operation, and most of all the compactness of package. For TRUSS, TADANO is the crane.
Hidetoshi Iga • 281/869-0030 • 281/869-0040 fax
Email: higa@tadano-cranes.com
Web site: www.tadanoamerica.com

Temple-Inland ★

Pg: 11 Temple-Inland has been dedicated to manufacturing outstanding products to meet customer needs for over 100 years. We supply solid wood lumber, gypsum wallboard, particleboard, medium density fiberboard and engineered wood siding, trim and sheathing for residential and commercial construction projects. Whether for new construction or remodeling, our expanding product line provides a range of solutions to today's building challenges.
Pat Patrarella: Vice President, Marketing - Solid Wood
800/231-6060 • 936-829-1730 fax
Email: patpatrarella@templeinland.com
Web site: www.temple.com

Todd Drummond Consulting

Pg: 37 Having problems that need attention in your component manufacturing? Contact Todd Drummond, I can help you get the results you need to resolve issues. I specialize in the roof and wall panel manufacturing industry. If your issues that you are wrestling with are sales, design or manufacturing I have proven on the job experience to get the required results. Need a temporary manager to supervise and train others? Willing to travel anywhere on this earth to help you deal with the special challenges of component manufacturing.
Todd Drummond • 603/763-8857 • 815-364-2923 fax
Email: todd@todd-drummond.com
Web site: www.todd-drummond.com

Tolleson Lumber Company Inc. ★

Pg: 16 Tolleson Lumber Company is a family owned business that has produced quality southern yellow pine lumber since 1919. Our state of the art sawmills are located in Perry, Georgia and Preston, Georgia, with a combined capacity in excess of 200 million board feet annually. Production includes #1, #2, and MSR grade marked lumber. In addition to truck shipments our mills have rail service on CSXT and NS. We also maintain on the ground inventory of MSR lumber in Aurora, Illinois, La Crosse, Wisconsin and Reading, Pennsylvania. We believe in long term relationships.
Joe Kusar • 478/988-3800 • 478/987-0160 fax
Email: jkusar@tollesonlumber.com
Web site: www.tollesonlumber.com

Truswal Systems Corporation ★

Pgs: 40-41 Truswal is a privately held corporation, which provides state of the art software systems developed to GROW your business. Truswal's newest introduction is the software suite Truswal Intellibuild, which includes Truswal TrusPlus, Truswal RoofLine, Truswal TrusManager, Truswal WinBatch and Truswal WallBuilder. We offer the only Parametric Design Technology in the industry. Truswal also offers quality production & delivery equipment along with laser projection systems. Truswal believes in offering the best personal customer service—and, is the only plate company to staff a 24-Hour Help Line! Truswal is also the home to Truswal SpaceJoist TE. Truswal is committed to being the most innovative and attentive company in the marketplace.
Carl Schoening • 800/521-9790 • 817/652-3079 fax
Email: carlschoening@truswal.com
Web site: www.truswal.com

Turb – O – Web USA, Inc. ★

Pg: 24 Turb-O-Web™ is a concept gaining many devotees in recent times in the USA as the benefits of this exciting innovation become more apparent. Turb-O-Web™ uses standardized wooden webs in roof trusses to reduce the amount of work required to manufacture the trusses, giving savings in lumber, saw time & assembly time. Now entering its 4th big year in the USA many truss fabricators are asking themselves "Why waste money cutting webs the old way when I can use Turb-O-Webs?"
John Griffith • 888/TURB-O-WEB (888/887-2693) • 321/747-0306 fax
Email: john@turb-o-web.com
Web site: www.turb-o-web.com

USP Structural Connectors ★

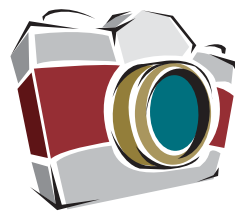
Pg: 33 USP Structural Connectors is redefining industry standards with an extensive line of plated truss connectors as well as exclusive products for numerous framing needs. USP provides customer service and in-house engineering support that is the best in the industry. With eight strategically located facilities, USP products are readily available throughout North America.
Steve Hanek • 800/328-5934 ext. 236 • 507/364-8762 fax
Email: shanek@uspconnectors.com
Web site: www.uspconnectors.com

Vecoplan, LLC ★

Pg: 15 For over 30 years, Vecoplan has provided innovative size reduction equipment and systems to the wood industry. Vecoplan's product offerings include a whole spectrum of wood waste handling equipment such as ReTech Single Shaft Rotary Grinders, Horizontal Grinders and an expanded line of material handling equipment. All products are backed up with aggressive guarantees and parts and service support from experienced professionals at our North Carolina facility.
Bob Gilmore and Rusty Angel • 336/861-6070 • 336/861-4329 fax
Email: infosbc@VecoplanLLC.com
Web site: www.VecoplanLLC.com

Wood Truss Council of America ★

Pg: 23, 24, 35, 49, 65, 69, 77, 86 WTCA has become a leading force in helping to strengthen the truss industry. The recent growth of WTCA's technical and marketing capabilities increases the tangible benefits to our members. To learn more about WTCA call:
608/274-4849 • 608/274-3329 fax
Email: wtca@woodtruss.com
Web site: www.woodtruss.com



Parting Shots

Share your stories and photos with us! Send submissions to partingshots@sbcmag.info.



During the WTCA Open Quarterly meeting this past February Richard Brown, President of Truss Systems, welcomed WTCA members to their plant in Oxford, GA, for a tour and barbeque. Many thanks to Richard and his staff for their excellent southern hospitality! **SBC**

On the Lighter Side: The Good Old Days!

The following were some comments made in the year 1957:

- I'll tell you one thing, if things keep going the way they are, it's going to be impossible to buy a weeks groceries for \$20.00.
- Have you seen the new cars coming out next year? It won't be long when \$5,000 will only buy a used one.
- If cigarettes keep going up in price, I'm going to quit. A quarter a pack is ridiculous.
- Did you hear the post office is thinking about charging a dime just to mail a letter?
- If they raise the minimum wage to \$1, nobody will be able to hire outside help at the store.
- When I first started driving, who would have thought gas would someday cost 29 cents a gallon. Guess we'd be better off leaving the car in the garage.
- Kids today are impossible. Those ducktail hair cuts make it impossible to stay groomed. Next thing you know, boys will be wearing their hair as long as the girls.
- I'm afraid to send my kids to the movies any more. Ever since they let Clark Gable get by with saying damn in *Gone With The Wind*, it seems every new movie has either hell or damn in it.
- I read the other day where some scientist thinks it's possible to put a man on the moon by the end of the century. They even have some fellows they call astronauts preparing for it down in Texas.
- Did you see where some baseball player just signed a contract for \$75,000 a year just to play ball? It wouldn't surprise me if someday that they will be making more than the President.
- I never thought I'd see the day all our kitchen appliances would be electric. They are even making electric typewriters now.
- It won't be long before young couples are going to have to hire someone to watch their kids so they can both work.
- Thank goodness I won't live to see the day when the Government takes half our income in taxes. I sometimes wonder if we are electing the best people to Congress.
- The drive-in restaurant is convenient in nice weather, but I seriously doubt they will ever catch on.
- There is no sense going to Lincoln or Omaha anymore for a weekend. It costs nearly \$15.00 a night to stay in a hotel.
- No one can afford to be sick any more, \$35.00 a day in the hospital is too rich for my blood. **SBC**

You're going to love our New Math.

We've always been a little different. More "Out of the Box" kind of thinkers. Our new cuts-any-wall-or-roof-truss-part **Miser** is our latest example. It changes the way plant managers do their math.

Other single blade, linear fed saws typically require 3 workers for peak production. A picker, a feeder, and a stacker. Our Miser, with its Material Handling System that automatically dispenses and feeds lumber stock, requires just 1 operator for peak production. **THE NEW MATH: 1 Miser operator = 3 competitive saw operators.**

Other saws typically go about as fast as their 3 operators feel like going. So you'll have your good production days and your not-so-good production days. The Miser, on the other hand, cuts at an industry-leading rate of 250 to 300-plus parts per hour. It'll do that today, tomorrow and every day – because the Miser automated material handling system determines production rates. Not the operator. **THE NEW MATH: 1 Miser wood processing system = a consistent 250 to 300-plus parts an hour. Again, all with a single operator.**



Now, near as we can figure, one 10-foot piece of Miser-processed lumber equals 11 feet worth of finished components. That's because Miser can cut and handle 4 or 5 angled parts short as 6", even less. This

unparalleled mechanical ability, coupled with Miser's optimizing software (called "Board Stretcher"), means drop off is all but insignificant. Miser plants will realize about 10% more finished components overall from the same amount of stock. **THE NEW MATH. 100% INPUT = 110% OUTPUT.**

It all adds up to less equaling more. A lot more!

One Miser doing the work of multiple saws. One operator producing components at a consistently higher rate than 3 operators. 1000 board feet of stock making components that typically require 1100 board feet. And all with more accuracy, more software-vendor compatibility, more safety, and more dust control. **THE NEW MISER MATH. NOW GO FIGURE.**



Contact us for a see-it in action video.

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Automation that works.™

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Component Saws

Manual, Semi-Automatic, & Computerized Controlled Operations



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WB 400™

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Roof Cords Saws
Floor Webs Saws
Custom saws



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